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H.R. 5632, A BILL TO PROHIBIT THE IMPORTATION OF CERTAIN LOW-LEVEL RADIOACTIVE WASTE INTO THE UNITED STATES

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

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H.R. 5632, A BILL TO PROHIBIT THE IMPORTATION OF CERTAIN LOW-LEVEL RADIOACTIVE WASTE INTO THE UNITED STATES

TUESDAY, MAY 20, 2008

House of Representatives,
Subcommittee on Energy and Air Quality,
Committee on Energy and Commerce,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2123 of the Rayburn House Office Building, Hon. Rick Boucher (chairman of the subcommittee) presiding.

Members present: Representatives Boucher, Butterfield, Melancon, Barrow, Inslee, Matheson, Gordon, Dingell (ex officio), Upton, Hall, Whitfield, Shimkus, Walden, and Blackburn.

Staff present: Sue Sheridan, John Jimison, Laura Vaught, Bruce Harris, Chris Treanor, Rachel Bleshman, Alex Haurek, David McCarthy, and Garrett Golding.

OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. Boucher. The Committee will come to order.

Today the subcommittee holds a hearing on a bipartisan measure which has been introduced by three of our colleagues on this committee: the gentleman from Tennessee, Mr. Gordon; the gentleman from Utah, Mr. Matheson; and the gentleman from Kentucky, Mr. Whitfield. The legislation they have introduced would prohibit the importation of low-level radioactive waste into the United States from other countries unless the President determines that the importation is necessary to national security or for international policy reasons.

The Low-Level Radioactive Waste Policy Act of 1980 and the successor amendments adopted to that law in 1985 established the definition of low-level radioactive waste and set the national policy that each state take responsibility for disposing of the waste that is generated within its borders. The 1985 Act also encouraged States to enter into interstate compacts under which a group of States would agree to develop a common site for the disposal of the waste generated within their borders. The Act further authorizes the compact to exclude from that common site waste that is produced from outside the member States.

Currently, there are three active licensed facilities for disposing of low-level radioactive waste: one in Barnwell, South Carolina; one in Richland, Washington; and a commercial facility in Clive, Utah, which is operated by EnergySolutions. The Clive, Utah, facility is licensed by the State of Utah in that State's capacity as a Nuclear Regulatory Commission agreement State. There is ongoing controversy as to whether the Utah facility may be subject to authority of the Northwest Compact as well.

EnergySolutions has filed a license application with the NRC to import up to 20,000 tons of various types of materials from decommissioned nuclear facilities in Italy. The company proposes to process and recycle the material at its Bear Creek facility in the State of Tennessee, and after treatment in Tennessee, the company proposes to send the remaining waste to its Utah facility for permanent disposal.

The pending application before the NRC is currently the subject of an open comment period, which closes on June 10 of this year. That pending application has been the source of considerable controversy. The State of Utah has expressed its opposition to the application. The Northwest Compact has recently taken action also in opposition to the application, and EnergySolutions has filed suit in U.S. District Court in Utah requesting a declaratory judgment.

While the legislation that is the subject of today's hearing is not limited to the application that EnergySolutions has filed to import from Italy low-level waste for processing in Tennessee and ultimate disposal in Utah, the legislation does bear upon the matters in controversy, which have been raised with regard to that pending application.

In addition, there have been concerns expressed by some with regard to the current capacity of low-level radioactive waste disposal facilities within the United States, the sufficiency of those sites for both current and future domestic disposal needs and how the importation of waste from other nations could affect the capacity of disposal facilities in the United States.

Today's hearing will provide valuable information on the process under current law for the potential importation of low-level radioactive waste and will inform the subcommittee as to the appropriateness or necessity of any further congressional action.

That concludes my opening statement.

Mr. BOUCHER. I now recognize for 5 minutes the ranking member of this subcommittee, the gentleman from Michigan, Mr. Upton.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman, and as a strong supporter of nuclear power, I would hope that today's hearing on importing low-level waste is just a first step towards discussing the larger issue of long-term storage of spent nuclear fuel or the nuclear fuel cycle. I see the bill at the center of this hearing as a NIMBY, not in my backyard, issue that could serve as a distraction from the coming nuclear renaissance many of us are fighting for. I look forward to upcoming hearings on building new nuclear power plants, recycling spent fuel, and certainly the successful completion of Yucca Mountain.

While I have great respect for my friends on the other side who introduced this legislation, I am concerned that it could be used by the opponents of nuclear power to delay new plants from coming online and cause perhaps further roadblocks to the recycling and safe disposal of spent fuel and low-level waste. Despite what the proponents of this legislation may claim today, this isn't necessarily about importing waste from Italy, which happens to be identical to the domestic waste safely being processed and disposed of today. This is about shutting down all of our domestic processing and disposal capabilities and eventually the mothballing of all our zero-emissions nuclear power plants.

In a statement last November, Mr. Gordon said, "I don't want Tennessee to become the Nation's and now the world's nuclear dumping ground." Waste is not being dumped in Tennessee, it is being processed and recycled there before it is safely disposed of at a privately owned site in Utah. If the opponents of nuclear energy were successful in shutting down the recycling facility in Oak Ridge, Tennessee, it would have a devastating impact on the 104 nuclear reactors that are operating right now in this country. Low-level radioactive material from nearly all 104 domestic nuclear plants is sent to Bear Creek for processing and Clive, Utah, for safe storage. We cannot compete on a global scale if we shut down our domestic facilities.

Members of this very subcommittee represent 18 different States that send waste to be processed and stored by EnergySolutions at their facilities. For myself, I have two nuclear plants in my district that send their low-level waste across State lines for processing and storage. These services are essential to the success of nuclear power.

We know that nuclear power is safe, clean, and affordable, and by enhancing our use of nuclear, we can reduce greenhouse gas emissions, protect the environment, and achieve more energy independence. Nuclear power produces only 20 percent of our electricity but represents a staggering 70 percent of the Nation's zero-emissions power, and by blocking the safe disposal and recycling of waste, we are taking our eye off the ball and distracting ourselves from one of the most effective domestic energy sources to fight climate change.

Unfortunately, at issue today is low-level waste, while the real issue for us to address should be fulfilling our commitment to permanently and safely storing spent nuclear fuel deep inside Yucca Mountain in the Nevada desert. Spent nuclear fuel as well as low-level waste should be located at one site deep within the bedrock of the Nevada desert for tens of thousands of years rather than in temporary stockpiles scattered through 31 different States.

An issue I would like to see the subcommittee address is the great capability of reprocessing spent nuclear fuel. Through advanced technologies that reduce the volume, heat, and toxicity of used nuclear fuel, it is possible to separate the uranium from the spent fuel to once again power commercial nuclear reactors. With our current once-through fuel cycle, an individual's lifetime footprint of spent fuel is about the size of a soda pop can. Using proven recycling technology, we would be able to reduce the volume of our spent nuclear fuel footprint 95 percent to that of a Kennedy half dollar. It is my hope that we can take advantage of these exciting technologies that will allow us to not only extract more power from nuclear fuel but also dramatically reduce the amount of spent fuel across the Nation, and I look forward to working with my friends on both sides of the aisle and in the House and the Senate on this committee to produce legislation that we hopefully can get to the President's desk yet this year.

It is imperative that clean nuclear power is at the forefront as we seek to solidify our Nation's energy supply and foster a new era of energy independence and reduced emissions. As applications for 32 nuclear plants are expected over the next couple of years, we are on our way to fulfilling our commitment to safe, clean nuclear power. Not only will our environment be better for it, our national security will also be bolstered. Millions of households will be powered by clean, zero-emission nuclear power and our Nation's economy will be powered by nuclear as well. Nuclear energy is the right course and we will all be better for it.

I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Upton.

The gentleman from Utah, Mr. Matheson, is one of the lead sponsors of H.R. 5632, and I am pleased to recognize him now for 3 minutes.

OPENING STATEMENT OF HON. JIM MATHESON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

Mr. MATHESON. Thank you, Mr. Chairman. Thank you for holding this hearing. I would like to thank our committee colleagues, Bart Gordon of Tennessee and Ed Whitfield of Kentucky, for their leadership on this issue.

Mr. Chairman, as you described in your opening statement, it was in 1980 when Congress started to address the problem of finding adequate disposal space for low-level radioactive waste generated in the United States. Now, let us be clear. This is waste that is generated as a byproduct of nuclear power generation and it includes debris and contaminated soils also from decommissioning of power plants. When Congress enacted legislation that allowed States greater freedom to determine and control access to the disposal sites, they did so through a regional compact system. In this way, States could pull together to limit access to a disposal site to membership in a compact or they could choose to grant wider access as needed.

Why are we here today? Because the problem we face now was not anticipated during the 1980s. The question is, does the current system provide the Federal Government or the States with the authority to oversee the importation of foreign-generated radioactive waste? It sounds like a strictly academic question because it is difficult for most of us to see why we would want to ever take radioactive waste from other countries, but right now the Nuclear Regulatory Commission has a pending application before it to allow 20,000 tons of low-level nuclear waste from Italy to be imported into this country.

We have two challenges to deal with here. We have the question of the disposal capacity in this country to deal with domestic-produced waste and we also have an unclear regulatory process for overseeing disposal of international waste. First of all, there are only three places in the United States where low-level waste can be disposed of. Although there have been efforts to site more storage locations, the process is complicated and requires a long lead time and a willing local community. Furthermore, as Congress looks to develop new carbon-free emissions sources, it is clear that new nuclear power plants will be built in the United States. Therefore, it is critical for Congress to look at our national capacity to deal with our own low-level waste disposal needs instead of encouraging large-scale waste importation from Europe.

The real problem we face today is also on the regulatory front. Everyone seems to be pointing their finger at someone else saying who is in charge. The NRC says it does not have the authority to prohibit the importation of waste into the United States. The State of Utah opposes this but it doesn't have the authority on its own to do so. The Northwest Compact has voted against bringing it here but the company trying to bring the waste in has already sued the Northwest Compact saying that the Northwest Compact does not have the authority to bring this waste in. So we have, in my opinion, a regulatory mess not anticipated in the 1980s and that is why it is important we consider this legislation today.

What is going on here? It seems to me at first glance the answer to the question should be obvious. The Federal Government has control over items being imported into this country. However, when it comes to radioactive waste, as I have stated, there appears to be uncertainty about who is in charge, who has the role to regulate whether this is a good decision or not. I hope this hearing can shed some light on this issue. The record clearly indicates that the establishment of the compact system was to find a way to dispose of domestic low-level radioactive waste. However, along the way, foreign waste was also allowed into the country for disposal in small amounts. We are here now because it seems as though the lack of clear policy has provided opportunities for importation of larger quantities of international waste. This is an opportunity to figure out what is really going on and to see if there are really any good reasons to encourage the importation of large amounts of low-level nuclear waste into the United States.

Mr. Chairman, thank you for holding this hearing, and I look forward to the question period later.

Mr. BOUCHER. Thank you very much, Mr. Matheson.

Another author of H.R. 5632 is the gentleman from Kentucky, Mr. Whitfield, who is now recognized for 3 minutes.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. Chairman, thank you very much for holding this important hearing and, as you say, I am one of the cosponsors of this legislation with Mr. Matheson and Mr. Gordon, and I think it is imperative that we hold this hearing to get the viewpoints of all the relevant parties to this important issue. I for one, the last thing that I want to be involved in is to do anything that would discourage the promotion of nuclear energy in this country, and I do have concerns that Mr. Matheson pointed out though, and that relates to capacity and the seeming confusion about who has authority to allow low-level waste in and the precise process that must be involved in reaching a decision on some of those issues.

I also want to commend EnergySolutions for the great job that they have been doing at Paducah, Kentucky, at the site of the Paducah gaseous diffusion plant and the coordination of the DUF-6 plant that is being built there. I think they have done a tremendous job there, and I do appreciate Mr. Creamer coming in and talking to me also about this issue.

So I think this will be an important hearing. It will shed a lot of light on this issue, Mr. Chairman, and with that, I will yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Whitfield.

The gentleman from Louisiana, Mr. Melancon, is recognized for 3 minutes.

Mr. MELANCON. I waive.

Mr. BOUCHER. The gentleman waives his opening statement.

Any member who chooses to waive the opening statement will have 3 minutes of questioning time added to that Member's time for questioning the first panel of witnesses.

The gentleman from Georgia, Mr. Barrow, is recognized for 3 minutes.

Mr. BARROW. I thank the Chair, and I will also waive.

Mr. BOUCHER. The gentleman waives his opening statement.

I will recognize Mr. Gordon as soon as possible. Under the rules of the subcommittee, since he is not a member, we need to have all of the members have the opportunity to make opening statements first, but we will come to you and we welcome you here this morning.

The Chair is pleased to recognize, if he is ready, the gentleman from Michigan, Mr. Dingell, who is chairman of the full committee, and we would welcome his opening statement of 5 minutes.

Mr. DINGELL. I would like to defer for just a second, because I have a very distinguished group here from Tubingen, Germany, that I would like to introduce to the Committee. I want to make sure they are all in the room before I mention them.

Mr. BOUCHER. OK. If you like, we will have another member offer a statement before we——

Mr. DINGELL. If you please, Mr. Chairman.

Mr. BOUCHER. Thank you, Mr. Chairman.

The gentleman from Texas, Mr. Hall, is recognized for 3 minutes.

Mr. HALL. If Mr. Barton, we are on different sides to this, but if he is hurt for time, I would yield to him. All right, I will waive then and take the same deal you made Mr. Melancon.

Mr. BOUCHER. Mr. Hall waives his opening statement.

The gentlelady from Tennessee, Ms. Blackburn, is recognized for 3 minutes.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Ms. BLACKBURN. Thank you, Mr. Chairman, and I will be very brief. I do want to thank you for the hearing and I want to thank our witnesses for taking the time to come and testify before the

Committee, and the issue that we are going to discuss today is very important to my home State of Tennessee and I know that Congressman Gordon will probably speak more eloquently to some of those issues, and some of my colleagues are very concerned about the importation of low-level radioactive waste from foreign countries and how that can be processed within the United States and they believe that it may set a precedent where our Nation becomes a depository of this waste, and I think the real question before us today is going to be whether the processing and disposal of foreign-generated radioactive waste will significantly impact the disposal of U.S.-generated waste.

So we will have some questions for you. We are looking forward to a robust discussion. We are looking forward to addressing some of the myths, the facts and the circumstances and how this affects our constituents in Tennessee.

I thank you for your time, and Mr. Chairman, I yield back.

Mr. BOUCHER. Thank you, Ms. Blackburn.

The gentleman from Michigan, Mr. Dingell, chairman of the full committee, is recognized for 5 minutes.

Mr. DINGELL. Mr. Chairman, I will be speaking out of order and I ask your permission there to do.

Mr. BOUCHER. Without objection.

OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. DINGELL. Mr. Chairman, we are honored this morning to welcome Ms. Caroline Melchers and Mr. Jacob Lerman. Ms. Melchers and Mr. Lerman are both American citizens but they are here with a very distinguished group of citizens of the Federal Republic of Germany from the city of Tubingen, a great university town and a wonderful part of that great country. As everyone knows, Germany is a great friend of the United States and we have not just a historic and a great friendship with our German friends but also a wonderfully cooperative relationship with that wonderful country.

I would like to observe that our guests this morning are from an organization—my German is not very good but I hope all will forgive me—Freunderstatz Partnershoft Tubingen. Tubingen is a sister city of Ann Arbor, which is a very important community in the district that I happen to have the honor to serve. They are here to learn about the United States. I told them our culture isn't quite as good as that which we would find in Germany, but I observed also that they are certainly very, very welcome here and we are honored that they would come over here. They wanted to see a committee at work and I have not had a chance to tell them that this is the greatest of the committees in the Congress. It is also, as we all know, not only the greatest but also the oldest and it is one that has been chaired by men like Sam Rayburn and some of the giants of this institution.

Having said that, I would like to thank you for your courtesy in welcoming them and in making it possible for me to do so. I would like to also thank my colleagues for their courtesy to me in permitting me to use this time and I would like also to express our welcome to our friends from Tubingen and Ms. Melchers and Mr. Lerman.

So ladies and gentleman, I hope you feel welcome, and thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Dingell, and I also would like to extend the subcommittee's welcome to our distinguished guests from the Federal Republic of Germany this morning.

The gentleman from Illinois—Mr. Dingell, did you have something else you wanted to say? No, apparently not. Mr. Dingell?

Mr. DINGELL. Mr. Chairman, I guess that I will address the business that I was going to address this morning. I want to thank you for this hearing, and I also want to observe less with regard to the business of the committee today than the comments that I think we would all want to make about a very distinguished member of our staff. All of us know of the extraordinary work that Sue Sheridan has done for this committee and for this country during her service here as our chief counsel for Energy and Air Quality. Sue announced last week she is retiring after 28 years of Federal service, this in spite of my best efforts to see to it that she did not carry forward on that threat. Sue leaves behind an extraordinary record of government service beginning in the General Counsel's Office at the Department of Energy to the Domestic Policy Council in the White House, and finally to this committee. She served here from 1983 to 1994 as attorney for the Subcommittee on Energy and Power chaired by our distinguished friend, Phil Sharp, and later joined the full committee staff where for the last 14 years she served both in the Minority and the Majority, and she has been a senior counsel and chief counsel for energy where she has guided us well and served the country, the Congress and the Committee with distinction.

She is, as we all know, a consummate professional. She is always ready with the facts, with sage advice, and respectful of the committee and its members regardless of party affiliation. All of us know her as a superb lawyer whose analytic capabilities and whose advice have served all of us well every time we had had the opportunity to call upon her. There are few energy statutes that she hasn't worked on and that haven't benefited from her very careful, thorough, thoughtful, and decent approach to legislation and to her respect for the law.

I know that I speak for all of our members who have worked with Sue over the years, and when I say that she will be missed, it is indeed an understatement. On behalf of myself, Sue, and on behalf of the Committee and on behalf of the Subcommittee and on behalf of the people here with whom you have worked and for whom you have worked, I want you to know that you have served well with distinction, with ability, with decency, with dedication, and we are proud of the work that you have done. Stand up, Sue, so we can give you a round of applause.

I will make two observations. One is, it is not too late for you to reconsider, and two, if you want to come back, the door will be open.

Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Dingell, and I want to add my voice to that eloquent tribute to the work of Sue Sheridan over the many years that she has served this subcommittee and the full Committee on Energy and Commerce. We have all benefited tremendously from the advice that she has offered to members on both sides of the aisle. I don't think anyone surpasses Sue's expertise on matters of energy policy, and as Chairman Dingell indicated, she has her fingerprints on all of the energy policy that has been approved by this committee and by the Congress in recent years. We are going to miss that advice and counsel and we look forward to continuing our consultation with Sue in whatever career path she chooses. So best wishes to you, Sue, and thank you for your many years of service.

The gentleman from Illinois, Mr. Shimkus, is recognized for 3 minutes.

Mr. HALL. I ask unanimous consent just to say a word about Sue.

Mr. BOUCHER. Without objection, the gentleman from Texas, Mr. Hall, is recognized.

Mr. HALL. You mentioned both sides of the aisle, and I have been on both sides of the aisle. I too worked with Sue probably longer than more than anyone other than Mr. Dingell. She is a professional. She is not only of great service to this committee, to this Congress, to this Nation, but she is capable of friendship, and when I heard, Mr. Chairman, you say that she was going to go home, I just have one question about that. Why didn't I think of that?

I yield back my time. Sue, God bless you.

Mr. BOUCHER. Thank you, Mr. Hall.

The gentleman from Illinois, Mr. Shimkus, is recognized for 3 minutes.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Chairman. I wanted to be the first Republican to speak, but of course, Mr. Hall beat me to the punch. I too just want to concur. Sue has been a good friend and someone I could rely upon, and I will personally miss her friendship and her support. So I thank you for doing that, Chairman Dingell, and raising our awareness of that.

And our German friends are leaving now, but I wanted to tell them, I lived in Bamberg for 3 years, so we are headed to the NATO parliamentary assembly with Melancon, I hope, in Berlin to talk about our relationships in NATO, so I also want to welcome you here.

And Mr. Chairman, I will just end. I understand the importance of this legislation, this bill. I would more hope that we talk about a more pressing level, which would be high-level nuclear waste and the storage. If we want to increase electricity supply in this country, one of the best ways we can do that is move high-level nuclear waste offsite and to a long-term storage facility. My preference would be Yucca Mountain. But this is a pattern of nipping around the edges where we really need to expand electricity generation and low-cost power in this country, and some would say in an environmentally sound way, which would be without a carbon footprint. That is what we really need to do and send a signal.

I support this hearing and I want to welcome those who will testify. I hope to learn a lot on that behalf. With that, I yield back my time.

Mr. BOUCHER. Thank you very much, Mr. Shimkus.

Mr. Inslee was here and is no longer here. The gentleman from Tennessee, Mr. Gordon, not a member of the subcommittee but a valuable member of our full committee and chairman of the Committee on Science and Technology and a coauthor of the legislation pending before the subcommittee, is recognized for 3 minutes.

OPENING STATEMENT OF HON. BART GORDON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. GORDON. Thank you very much, and let me first thank you, Chairman Boucher, for calling this hearing and Ranking Member Upton for allowing us to have this today.

Let me also concur with Chairman Dingell and the others that have given accolades to Sue Sheridan. Sue clearly is an exemplary example of a public servant. I remember when she—I have been with her most of those 28 years and I remember when she gracefully with twins would walk up and back, still giving us good advice, and now to think they are on their way to college, it makes all of us feel like we are getting older here. But thank you, Sue, for what you have done.

Nuclear waste disposal is a challenging but important issue for Congress to address. As we discuss the issues of low-level waste management today, I want to make clear that my concern is about importing radioactive waste into this country. I am not antinuclear. Nuclear power has a role to play as we search for ways to meet our Nation's growing electricity demand and at the same time reduce our greenhouse gas emissions and ensuring we have somewhere to dispose of our domestic radioactive waste is critical.

And to my friend from Michigan, Mr. Upton, who raised me in his opening comments, let me make it perfectly clear, I don't want there to be any misunderstanding: I have no interest in closing down Bear Creek. This bill has nothing to do with shutting down any type of waste facility within this country. This bill is about helping your nuclear power plants in Michigan be sure there is a place for their low-level radioactive waste to go so that they are not shut down. This is what this bill is about. This bill is to help you help Michigan and to help our domestic facilities.

So here are the facts. Domestic use of radioactive materials produces a continuous stream of low-level radioactive waste. This stream is going to inevitably grow. The United States has only limited space for disposal of nuclear waste. There is an international shortage of disposal space. Many countries including Germany, Canada, Belgium, Switzerland, Mexico, the Netherlands, Italy, and Denmark do not have any disposal facilities for their waste. What is more, none of the nuclear waste-generating countries allow foreign waste to be imported to dispose of except the United States. If we welcome the importation of foreign radioactive waste for disposal, it is only natural that all of these countries will be happy to send their waste and let us deal with it for over 100 years.

EnergySolutions has made it clear that it intends to solicit this international business. The following are taken from the company's recent SEC filings, and I quote: "Our business is dependent upon the success of our international operations. We expect that our international operations will continue to account for a significant portion of our total revenues. We believe there are substantial near-term opportunities for us to market our nuclear services to international commercial and government customers including the provisions of specialized decommissioning and disposal services."

This may make sense for the company's bottom line but it isn't smart public policy for the United States. The argument that the United States must take everyone else's nuclear waste to protect the earth from global warming and to be a good steward of the earth just doesn't wash. All countries including Italy have those same responsibilities.

That is why I have joined with Mr. Matheson and Mr. Whitfield, two of my colleagues on this committee, in this bipartisan legislation to prohibit the importation of low-level radioactive waste. This bill brings us in line with the rest of the world. EnergySolutions' attempt to import 2,000 tons of waste from Italy showcases a serious gap in our national policy and a serious need for this bill because this is only the beginning of what could be a massive commercial business.

Some might argue the Nuclear Regulatory Commission should decide whether importing waste is appropriate, but the NRC has made it clear that it doesn't have the authority to make policy decisions about importing nuclear waste. Others might suggest that we should leave the decision to the interstate compacts but EnergySolutions has filed a lawsuit arguing that the compacts don't have authority over importing nuclear waste. The fact of the matter is, nuclear waste management is a national issue and we need a national policy.

Here is the bottom line. Importing foreign radioactive waste reduces our finite domestic storage capacity, creates a 100-year-plus obligation for storage and protection, which could fall upon the American taxpayer since few companies are in existence for that long, and is a bad idea. Congress needs to act to stop it and our bipartisan bill helps do just that.

I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Gordon.

The gentleman from Michigan, Mr. Upton, is recognized for a unanimous-consent request.

Mr. UPTON. Mr. Chairman, I would ask unanimous consent that this opening statement by our ranking member, Joe Barton, be put into the record at this time.

Mr. BOUCHER. Without objection, and all opening statements that members may desire to make and submit for the record will be received and printed in the record of the hearing.

[The prepared statement of Mr. Barton follows:]

STATEMENT OF HON. JOE BARTON

Mr. Chairman, thank you for holding this important hearing today. Along with other members of this Committee and this Congress, I've had questions about importing low-level radioactive waste. I hope that this hearing will help us separate the wheat from the chaff, and I look forward to hearing the testimony from our witnesses.

We need to keep three important points in mind as we consider low-level radioactive imports: safety, security, and capacity.

The first and most important question is whether the the process of importing, recycling, and storing this stuff is safe. The answer we'll hear from a company in the industry is "yes." The answer we'll hear from the Nuclear Regulatory Commission ("NRC") is "yes, or we won't grant the license."

On the issue of security, the question is whether there is any increased risk from terrorism or other factors. I hope the NRC's response will be that "if there were such a risk we wouldn't have granted the import licenses we've already granted and if any future application poses this risk we won't grant that license."

And regarding capacity, the question is whether imports might crowd out domestic requirements. I understand that both the NRC and GAO will say that capacity for this type of waste is not a problem in the near term or long term.

Mr. Chairman, the rhetoric of prohibiting imports of low-level radioactive waste for recycling and storage has undeniable political appeal. But, as Members of the Committee with jurisdiction over this issue, we are obligated to consider more than just the politics. Ultimately, good policy makes good politics, so we need to know the facts, too.

Radioactive leftovers, whether they come from a nuclear power plant or a dentist's office, are a federal matter. As such, I think it would be ill-conceived to allow state or local governments or, for that matter-regional compacts-to dictate U.S. trade policy. If any of these entities has a safety, security, or capacity concern, we need to fully understand it.

Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. BOUCHER. The gentleman from Washington State, Mr. Inslee, is recognized for 3 minutes.

OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you. I just want to express a concern about current proposals that would really eviscerate the interstate compact system, and it is of great concern because we could have anarchy on this issue without these compacts. We have had a compact. It has been honored by the States and now it is being attempted to be dishonored, and that is very disappointing both because of the sovereign interests of the States but on a national level. These compacts have served well to bring some sense of rationality to these decisions, and when one party here attempts to essentially ignore them, I don't think it is helpful and I look forward to this hearing to expose the real problem of one entity trying to overcome and essentially bully these interstate compacts.

Thank you.

Mr. BOUCHER. Thank you, Mr. Inslee.

The gentleman from North Carolina, Mr. Butterfield, is recognized for 3 minutes.

OPENING STATEMENT OF HON. G.K. BUTTERFIELD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. BUTTERFIELD. Thank you very much, Mr. Chairman, for convening this hearing and I want to thank the gentlemen for offering this bill. I have read it. I have read the material associated with it. I think it is certainly very timely. I look forward to the hearing today. I cannot imagine, but maybe there is something that I have not read that would help me understand this issue. I thank you, Mr. Gordon.

I yield back.

Mr. BOUCHER. Thank you, Mr. Butterfield.

We now turn to our first panel of witnesses, and we welcome the testimony of both of them this morning. Ms. Margaret Doane is the Director of the International Program at the United States Nuclear Regulatory Commission, and Mr. Kent Bradford is chairman of the Utah Radiation Control Board. Without objection, your prepared written statements will be made a part of the record. We welcome your oral summary and ask that you keep that to approximately 5 minutes.

Ms. Doane, we will be pleased to begin with you.

STATEMENT OF MARGARET M. DOANE, DIRECTOR, OFFICE OF INTERNATIONAL PROGRAMS, U.S. NUCLEAR REGULATORY COMMISSION

Ms. DOANE. Thank you. Mr. Chairman and members of the subcommittee. As stated, my name is Margaret Doane and I am the Director of the Office of International Programs at the U.S. Nuclear Regulatory Commission. My office is responsible for reviewing the import and export license applications and issuing licenses pursuant to NRC's import and export licensing regulations.

My focus today will be on the NRC's regulatory framework for licensing the import of low-level radioactive waste. I would like to thank you in advance for providing the NRC with the opportunity today to discuss our import licensing process. As requested, we provided the prepared testimony for the record that describes in detail NRC's regulatory framework for licensing the import of low-level radioactive waste. At this time I will highlight key elements of that testimony.

The NRC reviews import and export license applications against the criteria defined in its regulations. Specifically, the NRC bases its licensing decisions on the following three criteria. First, the proposed import will not be inimical to the common defense and security, second, the proposed import will not constitute an unreasonable risk to public health and safety, and third, an appropriate facility has agreed to accept the waste for management or disposal

The NRC determines whether or not to issue an import license for radioactive waste based on its own health and safety and common defense and security evaluation. The NRC's evaluation is formed only after consulting with the Executive Branch through the Department of State, the applicable host State and the applicable low-level radioactive waste compact and consideration of public comments. The NRC has exclusive jurisdiction within the United States for granting or denying licenses to import radioactive waste. The NRC, however, recognizes the legal authority of the relevant host State and low-level radioactive waste compact to accept or reject low-level radioactive waste for disposal or management in the compact region.

Accordingly, the NRC consults with the applicable host State and regulatory officials for their health and safety views on the proposed import and to confirm that the proposed import of radioactive waste is consistent with the State-issued possession license for the disposal facility. Likewise, the NRC consults the applicable low-level radioactive waste compact commission to determine whether the compact will accept out-of-compact waste for disposal in a regional facility. To ensure that no radioactive waste imported into the United States becomes orphaned waste, the NRC will not grant an import license for waste intended for disposal unless it is clear from these consultations that the waste will be accepted by the applicable host State and, where applicable, the low-level radioactive waste compact.

As requested by the Subcommittee, I would like to turn to questions regarding disposal capacity for low-level waste in the United States. In the short term, the NRC has not identified capacity issues with regard to Class A disposal at EnergySolutions' Clive, Utah, facility. In reviewing waste import applications, the agency as a regulator would not address future domestic disposal capacity in the absence of a public health and safety or common defense and security concern. The NRC's review focuses on whether there is disposal space available for the material specified in the particular import application. It is conceivable, however, that a particular import application could raise questions regarding future domestic disposal capacity that the NRC would address in its regulatory role. For example, such questions could arise in the context of the third criterion for NRC review, whether there is an appropriate facility that has agreed to accept the waste for management or disposal. For these reasons, in making its determination, the NRC obtains the views of the affected low-level waste compacts and States and the Executive Branch.

The pure policy question of whether as a general matter foreign waste should be permitted to take up space in U.S. disposal facilities would necessarily involve interests that are beyond the traditional role of a regulator to consider. These may include foreign and interstate commerce, entrepreneurial interests, States' concerns and expectations in light of their substantial responsibility under the regional compact system and Low-Level Radioactive Waste Policy Act. However, the NRC would be pleased to share its views on the effect of the proposed H.R. 5632 on import and export licensing and contribute its technical expertise to those decision makers better situated to decide the questions the draft legislation involves.

Mr. Chairman, as you mentioned, the NRC has under consideration the EnergySolutions import and export application to accept material from Italy for disposal. The public comment period and time within which to request a hearing on this application are still open. Therefore, as it relates to the application, my testimony should be limited to allow for unbiased consideration after the comment period closes of all views expressed to the NRC on whether to grant or deny the application.

In conclusion, the NRC's role in evaluating low-level waste import applications is a regulatory one, limited to ensuring that the proposed import can be accomplished safely and securely in accordance with all applicable legal requirements.

Mr. Chairman and members of the subcommittee, this concludes my statement. I would now be happy to answer any questions that the Subcommittee may have for me.

[The prepared statement of Ms. Doane follows:]

WRITTEN TESTIMONY
OF MARGARET M. DOANE, DIRECTOR
OFFICE OF INTERNATIONAL PROGRAMS
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND AIR QUALITY
UNITED STATES HOUSE OF REPRESENTATIVES
REGARDING
H.R. 5632, A BILL TO PROHIBIT THE IMPORTATION OF CERTAIN LOW-LEVEL RADIOACTIVE WASTE INTO THE UNITED STATES

MAY 20, 2008

Mr. Chairman and Members of the Subcommittee, thank you for inviting the U.S. Nuclear Regulatory Commission (NRC) to this hearing today. As Director of the NRC's Office of International Programs, I am pleased to have this opportunity to discuss NRC's licensing requirement for importation of low-level radioactive waste. As requested by the Subcommittee, my focus today will be on NRC's regulatory framework for licensing the import of low-level radioactive waste.

Framework for Export and Import of Radioactive Waste

I want to describe the NRC's process in detail so that the Subcommittee has an understanding of the complete framework in which the specific case in question, that of the import of low-level radioactive waste from Italy, is taking place. The Atomic Energy

Act of 1954, as amended, grants the NRC exclusive jurisdiction to license exports and imports of source, special nuclear, and byproduct materials to and from the United States. The Act authorizes the import of radioactive material if domestic health and safety and common defense and security criteria are satisfied. The NRC's regulations governing such exports and imports are set forth in Title 10 of the Code of Federal Regulations, Part 110, "Export and Import of Nuclear Equipment and Material." The NRC's role in evaluating a low-level radioactive waste import application is a regulatory one, limited to ensuring that the proposed import can be accomplished safely and securely in accordance with all applicable legal requirements.

It is important for the subcommittee to understand at the outset the nature of NRC import licensing. The only permission granted by an NRC import license is permission to bring radioactive material across the border into the United States to a specified destination. The import license itself does not in any way regulate what is done with the material after it enters the country and becomes domestic material. Rather, a condition of all import licenses, specific or general, is that once the radioactive material enters the United States, the licensee must comply with all existing domestic laws and regulations applicable to the material. For low-level radioactive waste imports, the federal domestic scheme includes compliance with NRC and Agreement State regulations on safety, NRC regulations on security, the Low-Level Radioactive Waste Policy Act Compact system on capacity, and Department of Transportation regulations.

Prior to 1995, the NRC's regulations did not include a separate category for radioactive waste imports or exports. NRC import and export licensing regulations for source, special nuclear, and byproduct materials applied to radioactive waste depending on the waste's composition. In light of the nature of import licensing, which again simply lets material cross the border into the United States upon the condition that the licensee will comply with all applicable domestic laws, the NRC permitted most radioactive material to be imported into the United States under general licenses promulgated in 10 CFR Part 110. NRC's regulations in Part 110 required specific licenses only for certain imports that had nuclear weapons proliferation significance.

In the late 1980s, the United States joined with the international community in establishing better controls for transboundary movement of radioactive waste. The impetus for this decision was concern about the major industrialized nations "dumping" their radioactive waste in countries which did not have the appropriate administrative or technical infrastructure to safely dispose of it. This effort ultimately led to the International Atomic Energy Agency's (IAEA) adoption in September 1990 of the Code of Practice on the International Transboundary Movement of Radioactive Waste (the Code). The Code, which had strong U.S. Government support, established a set of principles to guide countries in the development and harmonization of policies and laws on the transboundary movement of radioactive waste to ensure its safe management and disposal. A basic principle of the Code is that international movements of radioactive waste should take place only with prior notification and/or consent of the sending country, receiving country, and countries through which it transits. The Code also provides that no receiving country should permit the receipt of radioactive waste for management or disposal unless it has the administrative and technical capacity and regulatory structure to manage and dispose of the waste in a manner consistent with international safety standards. The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention), which the United States subsequently ratified, is consistent with the Code.

In 1995, the NRC amended its regulations in Part 110 to conform NRC regulatory requirements for the import and export of radioactive waste to the guidelines of the Code. Since a basic principle of the Code was to require countries to track movements of radioactive waste across their borders so as to prevent radioactive waste from ending up in a country ill-equipped for safe management and disposal, the NRC amended its regulations to require specific licensing of both imports and exports of radioactive waste with limited exceptions.

Regulatory Review of Applications for the Export and Import of Radioactive Waste

I would now like to turn to how the NRC processes applications for the export and import of radioactive waste.

The NRC reviews import/export license applications against the criteria defined in Part 110. The NRC determines whether or not to issue an import license for radioactive waste based on its own health and safety and common defense and security evaluation. The NRC's evaluation is formed only after consulting with the Executive Branch, the applicable host State, and the applicable Low-Level Radioactive Waste Compact, and considering public comments. The NRC bases its licensing decisions on the following criteria found in 10 CFR Part 110.43: (1) the proposed import will not be inimical to the common defense and security; (2) the proposed import will not constitute an unreasonable risk to the public health and safety; and (3) an appropriate facility has agreed to accept the waste for management or disposal.

An applicant seeking to import (or export) radioactive waste must specify the maximum quantity of material in grams or kilograms (or terabequerels for byproduct material) and its chemical and physical form, the volume, waste classification (as defined in 10 CFR 61.55 of NRC's regulations), the physical and chemical characteristics, the route of transit of shipment, and the ultimate disposition including forms of management of the waste. The applicant must also specify the industrial or other process responsible for generation of the waste, and the status of the arrangements for disposition, for example, any agreement by a Low-Level Radioactive Waste Compact and/or host State to accept the material for management purposes or disposal. In some cases, bounding values for the amounts of waste may be provided, and in no case can the maximum amount specified result in the licensee exceeding the limits of its domestic materials possession license without a license amendment. The description must be sufficiently detailed so that the NRC staff can be assured that transportation, management and disposal requirements in the U.S. will be met for ensuring protection of public health, safety, and security.

NRC's regulations and practices provide for significant coordination with the Executive Branch through the Department of State (DOS) and the host State and Low-Level Radioactive Waste Compacts where the waste would be processed and/or disposed. The NRC also consults with the U.S. Environmental Protection Agency regarding applications that include mixed waste, in other words, radioactive waste mixed with other hazardous wastes. All license applications for the import and export of radioactive waste are made available to the public through the NRC Web site. The NRC publishes a notice in the *Federal Register* to provide the public with an opportunity to comment on the application and to request a hearing or petition for leave to intervene.

Early in the review process, the NRC forwards the application to the DOS. DOS is responsible for coordinating review by interested U.S. Federal Government agencies.

To either provide notice or obtain consent in accordance with the Joint Convention obligations, DOS also contacts the foreign government in the nation where the material originated or is destined to go. If necessary to satisfy the Joint Convention obligations, DOS may also consult with foreign governments of nations through which the material may transit. For proposed imports of radioactive waste, DOS contacts the government of the exporting nation and seeks acknowledgement they are aware of the proposed transaction and requests any comments they might wish to provide.

The NRC has exclusive jurisdiction within the United States for granting or denying licenses to import radioactive waste. The NRC, however, recognizes the legal authority of the relevant host State and Low-Level Radioactive Waste Compact to accept or reject low-level radioactive waste for disposal or management in the compact region. Accordingly, the NRC consults the applicable host Agreement State regulatory officials for their health and safety views on the proposed import and to confirm that the proposed import of radioactive waste is consistent with the state-issued possession license for the disposal facility. Likewise, the NRC consults the applicable Low-Level Radioactive Waste Compact Commission to determine whether the compact will accept out-of-compact waste for disposal in a regional facility. To ensure that no radioactive waste imported into the United States becomes orphaned waste, the NRC will not grant an import license for waste intended for disposal unless it is clear from these consultations that the waste will be accepted by the applicable host Agreement State and where applicable Low-Level Radioactive Waste Compact.

Implementation Experience

Since the 1995 rule was promulgated, the NRC has issued 13 licenses for the import of radioactive waste. Of those 13 issued licenses, seven have authorized import for disposal in the United States; of those seven, three have authorized import of U.S.-origin waste; and the remaining six licenses authorized import for processing and return of the processed waste to the country of origin. For additional information on licenses issued by the NRC since 1995, please see the attached table.

EnergySolutions Low-Level Radioactive Waste Import/Export Application

The NRC is currently evaluating a request from EnergySolutions, Inc. for a license to import low-level radioactive waste from Italy. The application requests the import of up to approximately 20,000 tons of radioactively contaminated material from nuclear power facility operations in Italy. The contaminated material includes metals; graphite; dry activity material, for example, wood, paper, and plastic; liquids, for example, aqueous and organic-based fluids; and ion exchange resins. After characterization in Italy, the contaminated materials would be inspected, sorted and processed at EnergySolutions' facilities in and licensed by the State of Tennessee, for recycling and beneficial reuse. The applicant estimates that after the processing in Tennessee approximately 1,600 tons of material would be sent for disposal at EnergySolutions' Clive, Utah disposal facility, which is licensed by the State of Utah. According to its application, no hazardous or mixed waste would be imported, and EnergySolutions would review and approve the content of each prospective shipment from Italy to the U.S. to ensure compliance with its domestic materials possession limits.

EnergySolutions also requested a radioactive waste export license that would allow it to return any nonconforming materials, that is, material received under its import license and identified at the processing facility in Tennessee that does not meet the waste acceptance criteria for the Clive, Utah disposal facility, to the generator in Italy for appropriate disposition in accordance with Italian requirements.

The NRC has solicited views from the states of Tennessee and Utah, the Southeast Compact Commission and Northwest Interstate Compact, and the Executive Branch (through the Department of State). The regulatory authorities in both Tennessee and Utah have informed the NRC that the material can safely go to the EnergySolutions facilities in their respective states. The Southeast Compact Commission expressed no objection to this application.

The NRC also offered members of the public the opportunity to submit comments or request a hearing on this application. The public comment period and deadline to submit a request for a hearing closes on June 10, 2008. To date the Commission has received over 2,000 comments on the application.

On May 8, 2008, members of the Northwest Interstate Compact unanimously adopted a resolution stating that the existing compact procedures do not address the import of foreign waste, and that such waste would need Compact approval before disposal at the EnergySolutions facility in Utah. The Northwest Compact notified the NRC by letter on May 15, 2008, that "should it choose to issue the import license [] it is doing so with the understanding there is no facility within the Northwest Compact region that is authorized to legally accept this waste for disposal." Prior to the Compact's resolution, EnergySolutions filed a lawsuit in Federal district court against the Northwest Compact challenging the compact's authority over the proposed import. The NRC is carefully monitoring developments and will evaluate the situation after the June 10th deadline to file comments or request a hearing.

National Waste Disposal Capacity and Foreign Waste

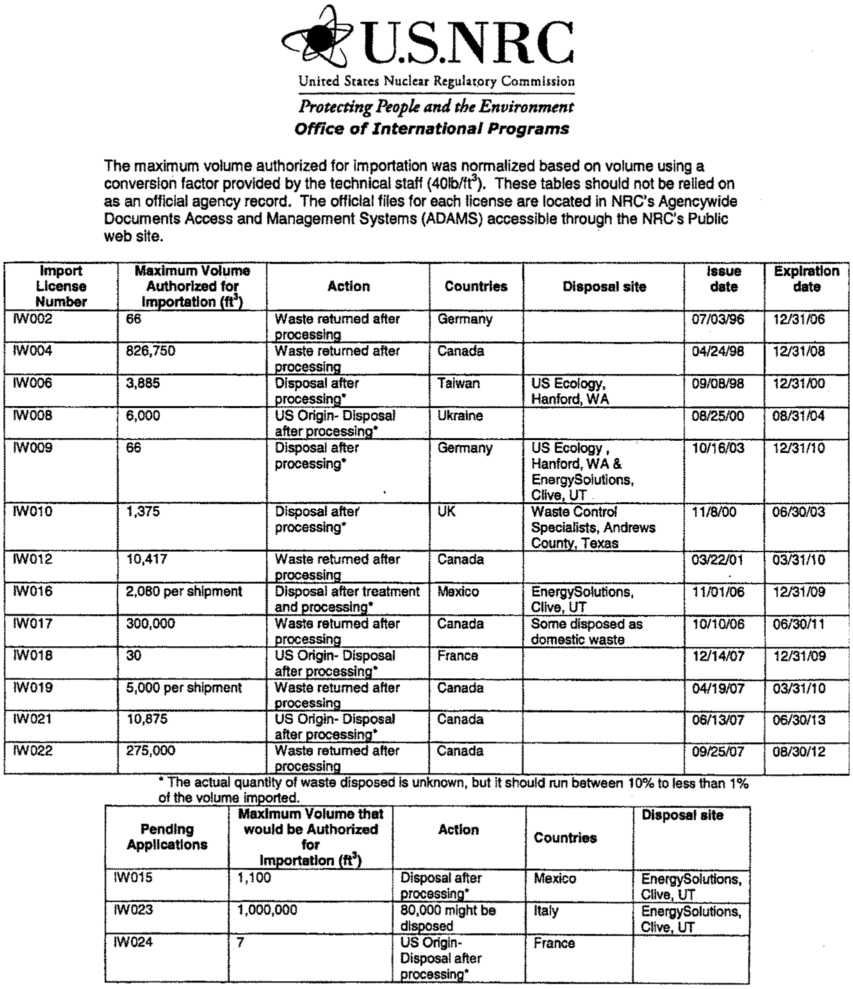
As requested by the Subcommittee, I would now like to turn to questions regarding disposal capacity for low-level waste in the United States. In the short-term, the NRC has not identified any capacity issues with regard to Class A disposal at EnergySolutions' Clive, Utah facility. We note that according to a report issued by the General Accounting Office in 2004, under current conditions there appears to be ample available disposal capacity for the foreseeable future for Class A low-level radioactive waste, particularly at the EnergySolutions facility in Utah, which accepts waste from other regions. However, the disposal capacity for Class B, C, and greater than Class C waste is limited and in short supply, in part because of the States' failure to develop new sites under the Low-Level Radioactive Waste Policy Act, and the decisions of two Low-Level Waste Compacts to bar out-of-compact waste disposal in their regional facilities. The availability of storage capacity for Class B and C waste has not arisen in the context of the import of low-level radioactive waste.

In reviewing waste import applications, the agency, as a regulator, would not address future domestic disposal capacity in the absence of a public health and safety or common defense and security concern. The NRC's review focuses on whether there is disposal space available for the material specified in a particular import application. It is conceivable however that a particular import application could raise questions regarding future domestic disposal capacity that the NRC would address in its regulatory role. In making its determination, the NRC obtains the views of the affected low-level waste compacts and States and the Executive Branch. The pure policy question of whether as a general matter foreign waste should be permitted to take up space in U.S. disposal facilities is a foreign commerce issue which is best addressed by Congress in conjunction with the Departments of State and Energy. Accordingly, the NRC takes no position on H.R. 5632.

Conclusion

The Atomic Energy Act authorizes the import of radioactive material only if domestic health and safety and common defense and security criteria are satisfied. Overall, the Act does not distinguish between domestic and foreign waste. The NRC's role in evaluating a low-level waste import application is a regulatory one, limited to ensuring that the proposed import can be accomplished safely and securely in accordance with all applicable legal requirements.

Again, the NRC appreciates the opportunity to testify today. At this point I would be happy to answer any questions that the Subcommittee may have.



U.S.NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

Office of International Programs

The maximum volume authorized for importation was normalized based on volume using a conversion factor provided by the technical staff (40lb/ft^3). These tables should not be relied on as an official agency record. The official files for each license are located in NRC's Agencywide Documents Access and Management Systems (ADAMS) accessible through the NRC's Public web site.

Import License Number	Maximum Volume Authorized for Importation (ft^3)	Action	Countries	Disposal site	Issue date	Expiration date
IW002	66	Waste returned after processing	Germany		07/03/96	12/31/06
IW004	826,750	Waste returned after processing	Canada		04/24/98	12/31/08
IW006	3,885	Disposal after processing*	Taiwan	US Ecology, Hanford, WA	09/08/98	12/31/00
IW008	6,000	US Origin- Disposal after processing*	Ukraine		08/25/00	08/31/04
IW009	66	Disposal after processing*	Germany	US Ecology , Hanford, WA & EnergySolutions, Clive, UT	10/16/03	12/31/10
IW010	1,375	Disposal after processing*	UK	Waste Control Specialists, Andrews County, Texas	11/8/00	06/30/03
IW012	10,417	Waste returned after processing	Canada		03/22/01	03/31/10
IW016	2,080 per shipment	Disposal after treatment and processing*	Mexico	EnergySolutions, Clive, UT	11/01/06	12/31/09
IW017	300,000	Waste returned after processing	Canada	Some disposed as domestic waste	10/10/06	06/30/11
IW018	30	US Origin- Disposal after processing*	France		12/14/07	12/31/09
IW019	5,000 per shipment	Waste returned after processing	Canada		04/19/07	03/31/10
IW021	10,875	US Origin- Disposal after processing*	Canada		06/13/07	06/30/13
IW022	275,000	Waste returned after processing	Canada		09/25/07	08/30/12

* The actual quantity of waste disposed is unknown, but it should run between 10% to less than 1% of the volume imported.

Pending Applications	Maximum Volume that would be Authorized for Importation (ft^3)	Action	Countries	Disposal site
IW015	1,100	Disposal after processing*	Mexico	EnergySolutions, Clive, UT
IW023	1,000,000	80,000 might be disposed	Italy	EnergySolutions, Clive, UT
IW024	7	US Origin- Disposal after processing*	France	

Mr. BOUCHER. Thank you very much, Ms. Doane.

Mr. Bradford.

STATEMENT OF KENT J. BRADFORD, CHAIRMAN, UTAH RADIATION CONTROL BOARD

Mr. BRADFORD. Mr. Chairman, members of the subcommittee, thank you for the opportunity to appear before you today to provide testimony concerning actions of the Utah Radiation Control Board with respect to the importation of foreign radioactive waste.

The Utah Radiation Control Board is charged with regulating radioactive materials and radiation sources in Utah to ensure the protection of the general public. The Utah Radiation Control Board is established by statute and consists of 13 members appointed by the Governor of Utah and confirmed by the Utah Senate. The members have a broad range of experience representing regulated industry, academia, local government, medical, and dental professions and the general public. Twelve of the 13 members including myself are volunteers. I am the current chair of the Utah Radiation Control Board and my profession is as an environmental and safety manager and I work for a company that is regulated by the Board.

I would now like to turn to the questions that you asked in your May 12th invitation letter. Question 1: What is the role, authority, and responsibilities of the Utah Radiation Control Board in regulating low-level radioactive waste?

Utah is an agreement State for low-level radioactive waste under the Atomic Energy Act and the Board therefore regulates radioactive waste facilities including disposal facilities in the place of the Nuclear Regulatory Commission. The Board makes rules and enforces rules and statutes that govern radioactive waste facilities. Among the Board's duties are two that are pertinent to the importation of radioactive waste from foreign countries. The Board is charged with regulatory oversight of low-level radioactive waste disposal facilities including EnergySolutions. It also has statutory authority to promote the planning and application of pollution prevention and radioactive waste minimization measures to prevent the unnecessary waste and depletion of natural resources.

Question Number 2: Please address any past actions by the Board with respect to foreign low-level radioactive waste imports to Utah.

When issues such as this importation question arise that are of interest or concern to the citizens of Utah, the Board may issue rules or may elect to issue position statements to guide the development of State and national policy.

When the matter of disposal of low-level radioactive waste from foreign countries arose, the Board discussed this and first considered issuing a rule prohibiting the disposal. However, we received legal counsel that suggested that the rule could be challenged as a violation of the commerce clause of the Constitution and so the Board elected then to issue a position statement in the form of a letter to the Chairman of the Nuclear Regulatory Commission. A copy of that letter is included in my written testimony. The letter expresses the Board's opposition to license amendments currently under review by the Nuclear Regulatory Commission for importation of foreign waste from Italy. In the letter to the Nuclear Regulatory Commission, the Board expressed what it heard: the citizens of Utah strongly oppose the importation of foreign waste. The Board believes that the State of Utah has done its fair share and more in providing appropriate disposal capacity for the Nation's low-level waste by permitting a low-level facility in our State. Providing disposal capacity for foreign waste was never discussed or contemplated at the time the State issued a license to the predecessor of EnergySolutions.

The Utah Radiation Control Board has not taken any previous action or position with respect to foreign low-level radioactive waste imports into Utah.

Question 3: Please address the Board's views on the adequacy of disposal capacity for low-level waste in the United States and whether there is a policy reason related to capacity to consider limiting importation of foreign waste for disposal in Utah.

As noted in the letter to the Nuclear Regulatory Commission, the Board has not taken a position with respect to domestic capacity for low-level waste except to note that the Nation's capacity is finite and that we must ensure that the Nation provides and retains domestic capacity for our own radioactive waste. In the letter to the NRC, we also state that the U.S. Nuclear Regulatory Commission and the United States Congress should work together to adopt a workable low-level radioactive waste plan.

The current system has not been successful in locating low-level disposal sites within the various State compacts. As a result, the large majority of radioactive waste, over 90 percent, is disposed at EnergySolutions in Utah. The majority of that waste has been from Federal generators. Congress should evaluate the current system and encourage other States and compacts to establish low-level disposal facilities

Question 4: Please address any position or observations the Board may have with respect to H.R. 5632.

We want to let you know that the Utah Radiation Control Board has not taken a position with respect to this legislation.

Thank you for your time and attention to this matter, and I would be happy to answer any questions.

[The prepared statement of Mr. Bradford follows:]

State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

Division of Radiation Control
Dane L. Finerfrock
Director

Radiation Control Board
Kent J. Bradford, P.G., *Chair*
Stephen T. Nelson, Ph.D., *Vice-Chair*
Scott Bird
Patrick D. Cone
Frank D. DeRosso, MSPH, CIH
Christian K. Gardner
Elizabeth Goryunova, M.S.
Peter A. Jenkins, M.S., CHP
Joette E. Langianese, Commissioner
Joseph K. Miner, M.D., MSPH
Gregory G. Oman, BS, DDS
Richard W. Sprott
John W. Thomson, MD
Dane L. Finerfrock,
Executive Secretary

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Testimony of
Kent J. Bradford, P.G., C.H.M.M.
Chair, Utah Radiation Control Board

Before the Subcommittee on Energy and Air Quality
Of The United States House of Representatives
Washington, DC
Tuesday, May 20, 2008
10:00 AM

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before you today to provide testimony regarding actions of the Utah Radiation Control Board with respect to importation of foreign radioactive waste.

Background

The Utah Radiation Control Board is charged with regulating radioactive materials and radiation sources to ensure the protection of the general public. The Utah Radiation Control Board is established by statute and consists of 13 members appointed by the Governor of Utah and confirmed by the Utah Senate. The members have a broad range of experience, representing regulated industry, academia, local governments, medical and dental professions, and the general public. Twelve of the 13 members, including myself, are volunteers.

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I am the current Chair of the Utah Radiation Control Board. My profession is environmental and safety management and I work for a company that is regulated by the Board. A copy of my Curriculum Vitae is included as Attachment 1 to this testimony.

I would like to turn now to the questions you asked in your May 12, 2008 letter.

1. *What is the role, authority, and responsibilities of the Utah Radiation Control Board in regulating low-level radioactive waste?*

   Utah is an "Agreement State" for low- level radioactive waste under the Atomic Energy Act, and the Board therefore regulates radioactive waste facilities, including disposal facilities, in the place of the Nuclear Regulatory Commission. The Board makes rules and enforces rules and statutes that govern radioactive waste facilities.

   Among the Board's duties are two that are pertinent to importation of radioactive waste from foreign countries. The Board is charged with regulatory oversight of low- level radioactive waste disposal facilities, including EnergySolutions. It also has statutory authority to promote the planning and application of pollution prevention and radioactive waste minimization measures to prevent the unnecessary waste and depletion of natural resources.

   A copy of the Board's statutory authority is provided as Attachment 2 to this testimony.

2. *Please address any past actions by the Board with respect to foreign low-level radioactive waste imports to Utah.*

   When issues arise that are of interest or concern to the citizens of Utah, the Board may issue rules, or it may elect to issue position statements to guide the development of State and national policy.

When the matter of disposal of low- level radioactive waste from foreign countries arose, the Board first considered issuing a rule prohibiting that disposal. However, we received legal advice that such a rule could be challenged as a violation of the Commerce Clause of the U.S. Constitution.

The Board elected then to issue a position statement in the form of a letter to the Chairman of the Nuclear Regulatory Commission. A copy of the letter is included as Attachment 3 to this Testimony. The letter expressed the Board's opposition to license amendments under review by the Nuclear Regulatory Commission for the importation of foreign waste from Italy.

In the letter to the Nuclear Regulatory Commission the Board expressed what it had heard: the citizens of the State of Utah strongly opposed the importation of foreign waste. The Board believes that the State has done its fair share and more in providing appropriate disposal capacity for the nation's low-level waste by permitting a low-level waste facility in the state. Providing disposal capacity for foreign waste was never discussed or contemplated at the time the State issued a license to the predecessor to EnergySolutions.

The Utah Radiation Control Board has not taken any previous action or position with respect to foreign low-level radioactive waste imports to Utah.

3. *Please address the Board's views on the adequacy of disposal capacity for low-level waste in the U.S. and whether there is a policy reason related to capacity to consider limiting importation of foreign waste for disposal in Utah.*

As noted in the letter to the Nuclear Regulatory Commission the Board has not taken a position with respect to domestic capacity for low-level waste except to note that the nation's capacity is finite and that we must ensure that the nation provides and retains domestic capacity for our own radioactive waste.

The letter to the NRC also states that "the U.S. Nuclear Regulatory Commission and the United States Congress should work together to adopt a workable National Low- Level Radioactive Waste plan." This current system has not been successful in locating low-level disposal sites within the various State Compacts. As a result, the large majority of volume of radioactive waste – over 90% – is disposed at EnergySolutions. The majority of that waste has been from federal generators. Congress should evaluate the current system and encourage other States and Compacts to establish low-level disposal sites.

4. *Please address any position or observations the Board may have with respect to H.R. 5632.*

The Utah Radiation Control Board has not taken a position with respect to H.R. 5632.

As requested, a one page summary of the major points of this testimony is included as Attachment 4 to this testimony.

Thank you for your time and attention to this matter. I would be happy to answer any questions at this time.

ATTACHMENT 1

Curriculum Vitae of Kent J. Bradford

Home: 811 East 3200 North
North Ogden, UT 84414
Phone: 801.737.0226
bradford.kj@gmail.com
bradfokj@westinghouse.com

KENT J. BRADFORD, P.G., C.H.M.M.

TITLE Chair, Utah Radiation Control Board

EXPERTISE Project Management
Regulatory Compliance
Environmental Remediation
Industrial Safety and Occupational Health

ACADEMIC BACKGROUND Brigham Young University, B.S., Geology, 1983

LICENSES AND CERTIFICATIONS Certified Professional Geologist, American Institute of Professional Geologists, C.P.G. #8466
Certified Hazardous Materials Manager, C.H.M.M. #5063
Licensed Professional Geologist, Wyoming License #PG-2800
Licensed Professional Geologist, Washington License #938
Licensed Professional Geologist, Utah License #5267899-2250
ISO 14001 Environmental Lead Auditor

PUBLIC SERVICE In 2001 Mr. Bradford was nominated to the Utah Radiation Control Board by Governor Michael Leavitt and subsequently confirmed to this position by the Utah Senate. He was reappointed to the Board for a second term by Governor Olene Walker in 2004. The Board guides development of Radiation Control policy and rules in the state. Mr. Bradford was elected Chair of the Board in 2006. He will continue to serve as Chairman of the Radiation Control Board until his appointment expires in June 2008. In this position he leads monthly Board meetings, presents summaries of Board actions to the Utah Legislative Natural Resources, Agriculture, and Environment Interim Committee, and adjudicates cases that are brought before the Board.

PROFESSIONAL EXPERIENCE Mr. Bradford is the Manager of Environment, Health and Safety for Utah operations of Westinghouse Electric Company. He has extensive experience in environmental compliance, site restoration and cleanup, and industrial safety.

Prior work includes effective implementation of complex technical programs to evaluate environmentally contaminated sites. He has conducted geologic, ground water, and surface water quality studies, and managed technical support contracts for the Utah Department of Environmental Quality. He worked as a Project Manager under a contract with the State of Utah and the US. EPA to provide technical assistance to Utah DEQ for CERCLA projects in EPA Region VIII.

Mr. Bradford has conducted a variety of RCRA Facility Investigations and led RCRA Corrective Action programs. He led initial site characterization work for Salt Lake City's Gateway Brownfield Redevelopment Project.

He is a former member of the Air Force Environmental Compliance Assessment Management Program (ECAMP) Team with responsibility for assessing operational environmental compliance at government owned and contractor operated (GOCO) Air Force facilities. Mr. Bradford also managed an environmental assessment and remediation contract for the U.S. Department of Energy, Bonneville Power Administration and directed soil sampling, environmental studies, and geotechnical assessments for construction projects at Tooele Army Depot and Dugway Proving Grounds in Tooele County, Utah.

ATTACHMENT 2

Utah Radiation Control Board's Statutory Authority

19-3-103.5. Board authority and duties.

(1) The board may:

(a) require submittal of specifications or other information relating to licensing applications for radioactive materials or registration of radiation sources for review, approval, disapproval, or termination;

(b) issue orders necessary to enforce the provisions of this part, enforce the orders by appropriate administrative and judicial proceedings, and institute judicial proceedings to secure compliance with this part;

(c) hold hearings and compel the attendance of witnesses, the production of documents, and other evidence, administer oaths and take testimony, and receive evidence it finds proper, or appoint hearing officers and authorize them to exercise the powers under this subsection;

(d) settle or compromise any administrative or civil action initiated to compel compliance with this part or any rules adopted under this part;

(e) advise, consult, cooperate with, and provide technical assistance to other agencies of the state and federal government, other states, interstate agencies, and affected groups, political subdivisions, industries, and other persons in carrying out the provisions of this part;

(f) promote the planning and application of pollution prevention and radioactive waste minimization measures to prevent the unnecessary waste and depletion of natural resources;

(g) cooperate with any persons in studies, research, or demonstration projects regarding radioactive waste management or control of radiation sources;

(h) accept, receive, and administer grants or other funds or gifts from public and private agencies, including the federal government, for the purpose of carrying out any of the functions of this part;

(i) exercise all incidental powers necessary to carry out the purposes of this part;

(j) submit an application to the U.S. Food and Drug Administration for approval as an accrediting body in accordance with 42 U.S.C. 263b, Mammography Quality Standards Act of 1992;

(k) accredit mammography facilities, pursuant to approval as an accrediting body from the U.S. Food and Drug Administration, in accordance with 42 U.S.C. 263b, Mammography Quality Standards Act of 1992; and

(l) review the qualifications of and issue certificates of approval to individuals who survey mammography equipment and oversee quality assurance practices at mammography facilities.

(2) The board shall:

(a) hear appeals of final decisions made by the executive secretary or appoint a hearing officer to hear the appeal and make recommendations to the board;

(b) prepare a radioactive waste management plan in compliance with Section **19-3-107** as soon as practicable; and

(c) impound radioactive material as authorized in Section **19-3-111**.

(3) Representatives of the board upon presentation of appropriate credentials may

enter at reasonable times upon the premises of public and private properties subject to regulation under this part to perform inspections to insure compliance with this part and rules made by the board.

Amended by Chapter 90, 1995 General Session
Download Code Section Zipped WordPerfect 19_03_010305.ZIP 3,274 Bytes

ATTACHMENT 3

March 10, 2008 Letter from the Utah Radiation Control Board to the U.S. Nuclear Regulatory Commission

State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

Division of Radiation Control
Dane L. Finerfrock
Director

Radiation Control Board
Kent J. Bradford, P.G., *Chair*
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Richard W. Sprott
John W. Thomson, MD
Dane L. Finerfrock,
Executive Secretary

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

March 10, 2008

Dale E. Klein, Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: Utah Radiation Control Board Position Statement on Importation of Foreign Low-Level Radioactive Waste

Dear Chairman Klein:

The Nuclear Regulatory Commission (NRC) is currently considering license applications (IW023 and XW013) from Energy*Solutions*, LLC, for importation of foreign waste for disposal in the State of Utah. The purpose of this letter is to inform you that the Utah Radiation Control Board opposes these licenses and importation of foreign radioactive waste for the purpose of disposal, even if the materials do not represent any incremental risk to public health and safety.

As you may be aware, Utah Governor Jon M. Huntsman, Jr. signed an agreement with Energy*Solutions* to limit the capacity of their Clive facility to accept additional waste. The Federal Government needs to ensure the nation's capability to safely dispose of our own future low- level radioactive waste. The nation's capacity is finite.

We recognize that there are legitimate reasons why radioactive materials cross international borders. One country may have more skill than another in reducing the volume or contamination level of wastes. In these cases countries may agree that wastes can be processed by the country with the expertise and returned to the country of origin for disposal. We also recognize that under certain circumstances it may be beneficial for two or more countries to share a waste disposal site where all contribute to the financing and operation of the facility and when it is acceptable to the host community. None of these situations exist for the proposed importation of Italian waste.

We believe that any country that has the technological capability of producing nuclear power within its borders should not seek to dispose of its

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waste outside them. Development of nuclear power should go hand in hand with the development of disposal options.

On February 1, 2008, the Utah Radiation Control Board heard from members of the public who are united in strong opposition to license applications leading to the importation and disposal of foreign nuclear waste. This is an issue of great concern to the citizens of Utah.

Therefore, we request that the Commission deny the importation licenses. Furthermore, the U.S. Nuclear Regulatory Commission and the United States Congress should work together to adopt a workable National Low Level Radioactive Waste plan. We must ensure that the nation provides and retains domestic capacity for our own radioactive waste.

Respectfully,

[Original Signed by: Kent J. Bradford, P.G., Chair]

Kent Bradford, Chair
Utah Radiation Control Board

cc: The Honorable Jon M. Huntsman, Jr.
The Honorable Bart Gordon
The Honorable Robert Bennett
The Honorable Orrin G. Hatch
The Honorable Rob Bishop
The Honorable Jim Matheson
The Honorable Chris Cannon
The Honorable Greg Curtis
The Honorable John Valentine
Mike Garner, Executive Director

ATTACHMENT 4

Summary of Testimony of Kent J. Bradford

Summary of Testimony of Kent J. Bradford, P.G., C.H.M.M.
Chair, Utah Radiation Control Board
Before the Subcommittee on Energy and Air Quality
Of The United States House of Representatives
Washington, D.C., Tuesday, May 20, 2008, 10:00 AM

1. I am the current Chair of the Utah Radiation Control Board, which is responsible for the regulatory oversight of low- level radioactive waste facilities in the state.
2. The Board prepared a policy statement that it sent to the Nuclear Regulatory Commission on Marcy 10, 2008. In that statement, the Board expressed what it had heard: the citizens of the State of Utah strongly oppose the importation of foreign waste. The State has done its fair share and more in providing appropriate disposal capacity for our nation's low-level waste by permitting EnergySolutions, a low-level waste disposal facility, to operate in the State. EnergySolutions provides disposal for the large majority – over 90% – of the volume of the nation's radioactive waste.
3. The nation's low- level radioactive waste capacity is finite and the Federal Government must work to ensure the nation's capability to safely dispose of our own future low-level radioactive waste.
4. The Board believes that any country that has the technological capability of producing nuclear power within its borders should not seek to dispose of its waste outside them. Development of nuclear power should go hand in hand with the development of disposal options.

Mr. BOUCHER. Thank you, Mr. Bradford, and I want to thank both witnesses for taking time to share their views with us this morning.

Ms. Doane, I have several questions for you clarifying various authorities of agreement States and also of compacts, and I would like for you to provide a little bit of background about our history with this issue. Have we ever received imported low-level waste into the United States previously?

Ms. DOANE. Yes, the NRC has granted 13 applications for the import of radioactive waste, and I can give you more specific information about those 13.

Mr. BOUCHER. Let me ask that you submit that to the subcommittee as a written submission, if that is not in your opening statement.

Ms. DOANE. It is in our opening statement.

Mr. BOUCHER. It is in your opening statement?

Ms. DOANE. Yes, and if you would like further details, we would be glad to provide that.

Mr. BOUCHER. That is helpful. Thank you. Can you describe the locations into which that low-level waste imported from other countries has been shipped for disposal?

Ms. DOANE. Yes, they are Waste Control Specialists, U.S. Ecology, and the EnergySolutions facility in Clive, Utah.

Mr. BOUCHER. Have they all gone to Clive or have they gone to other places?

Ms. DOANE. It depends on what we are talking about but they have gone to all facilities.

Mr. BOUCHER. To all facilities?

Ms. DOANE. Yes.

Mr. BOUCHER. So the Barnwell, South Carolina, site has received foreign waste previously?

Ms. DOANE. No.

Mr. BOUCHER. It has not?

Ms. DOANE. The Barnwell site has not, no.

Mr. BOUCHER. So the Clive, Utah, site has. How many other sites have received waste from other countries?

Ms. DOANE. U.S. Ecology has received waste——

Mr. BOUCHER. Now, where is that site situated?

Ms. DOANE. U.S. Ecology—Richland.

Mr. BOUCHER. That is Richland, Washington?

Ms. DOANE. Yes.

Mr. BOUCHER. Well, just identify, if you would, the sites in terms of location within the United States that have received waste that has been imported from other countries.

Ms. DOANE. OK. Let me refer to our table so that I am specific here.

Mr. BOUCHER. All right. You have indicated that the Richland, Washington, site has received waste from other countries. What other sites?

Ms. DOANE. Waste Control Specialists in Texas has the ability to receive waste from foreign countries and then the Clive, Utah, site has received waste from other countries. The reason why I am hesitating here is that when waste is imported into the country, and as you will see from our testimony, it is handled in several different ways. There is some waste that is imported directly for disposal. But some waste may first be processed and then takes on a different attribution. For example, waste that is generated in processing may be determined to be domestic waste. So while it came from the processing of a foreign import, it actually became domestic waste when it was disposed of in the facility. I don't know if that helps.

Mr. BOUCHER. Well, it is helpful.

Ms. DOANE. And we have three sites that can receive this kind of waste and we have received applications and granted them for disposal in the Clive, Utah, facility.

Mr. BOUCHER. Is the Texas site open at the present time?

Ms. DOANE. Yes.

Mr. BOUCHER. It is?

Ms. DOANE. The RCRA site is, but I am not sure what kind of waste we are discussing.

Mr. BOUCHER. Well, the subject is waste imported from other countries.

Ms. DOANE. No, no, it is not.

Mr. BOUCHER. So the Texas site is not open at the present time for waste imported from other countries?

Ms. DOANE. No, not for low-level radioactive waste from other countries. That is right.

Mr. BOUCHER. Is it open at the present time for other disposal purposes for waste from domestic sites?

Ms. DOANE. Yes, for RCRA disposal.

Mr. BOUCHER. OK. Do you believe that there are any valid concerns about the effect that the importation of waste from other countries could have on the capacity of the low-level waste sites to accommodate domestically produced low-level waste? And the reason I ask that question is that it would seem that capacity for general national application is shrinking rather than expanding. The Barnwell, South Carolina, site very shortly will only be accepting low-level waste from the Southeastern Compact, and at the present time the Richland, Washington, site accepts waste from its compact and the adjoining compact but no other waste.

Ms. DOANE. Right.

Mr. BOUCHER. Leaving, as I understand it, for States that are in compacts are unaffiliated States that do not have their own waste disposal sites, only the Clive, Utah, disposal site available. And so it would appear that for those States, there will be even less domestic capacity over time rather than more. Is that an accurate statement?

Ms. DOANE. That is an accurate statement.

Mr. BOUCHER. Are you concerned then about the effect that waste imports from other countries might have on the availability of disposal capacity for waste generated within the United States generally?

Ms. DOANE. Well, the Nuclear Regulatory Commission, as you know, has said that with respect to capacity, its focus has been on whether we could ensure public health and safety and common defense and security so to the extent that we look at capacity diminishing, we look at it in terms of whether it can be stored safely where it is. And so our focus is on adequate storage. So from a public health and safety perspective, we believe that in the short term we have sufficient regulations in place to ensure the adequate health and safety and we continue to look at these imports on a case-by-case basis.

Mr. BOUCHER. All right. Just briefly, and my time is expired so try to keep this answer relatively short, could you describe the authorities exercised by agreement States on the one hand and by compacts themselves on the other with regard to the permissibility of siting low-level waste disposal sites within that individual State for an agreement State or within the compact States generally? What is the authority of the compact on the one hand and the agreement State on the other with regard to the siting of those facilities?

Ms. DOANE. I apologize. I am with the Office of International Programs so I can tell you with respect to imports how both of those——

Mr. BOUCHER. OK. You are not prepared to discuss the authorities more generally with regard to that?

Ms. DOANE. I would prefer—I could——

Mr. BOUCHER. OK. I understand. It is not in your particular discipline. All right. That is fine. Thank you.

The gentleman from Texas, Mr. Hall, is recognized for 5 minutes.

Mr. HALL. Ms. Doane, you stated, I think, in your testimony that this bill would amend Chapter 8 of the Atomic Energy Act to bar the NRC from issuing license authorizing the importation in the United States of certain low-level radioactive waste and went on to say with exceptions for government or military use or return of certain U.S.-origin material unless the President waives the prohibition for a specific license application upon a finding that the importation would make "an important national or international goal," and that is still your feeling, is it not?

Ms. DOANE. Yes, it is.

Mr. HALL. And you have stated that the NRC, the criteria of the NRC bases its decision to grant an import license, and we understand that. Let me ask you this question. Do you have any concern or is there any concern with your associates, colleagues at NRC that Congress ought to have any right to take away its current authority to grant or deny an import license? Does that give you any concern, heartburn at all? It must give you a little.

Ms. DOANE. There would be views on both sides, I would assume. I think that on the one hand we would look at the impact on export/import licensing of course. We would no longer be doing these, so from a resource burden, that would have that effect. However, on the other side, we do look at these from a public health and safety perspective and have allowed them in the past.

Mr. HALL. Absolutely, and you all look at that yourselves, don't you?

Ms. DOANE. Yes.

Mr. HALL. Mr. Bradford, I think you have already stated that Utah Radiation Control Board has not taken a position with respect to this bill. That is correct still, is it not?

Mr. BRADFORD. Yes, that is correct.

Mr. HALL. Does the Utah Department of Environmental Quality do a good job, in your opinion, regulating the—is that Clive facility? Cleve or Clive?

Mr. BRADFORD. Clive. Yes, I believe that the Division of Radiation Control, which is a part of the Utah Department of Environmental Quality, does a good job of overseeing the operations of EnergySolutions.

Mr. HALL. And you don't think the Utah DEQ then would ever allow anything disposed at Clive that it thought was a health or safety risk, would it?

Mr. BRADFORD. No.

Mr. HALL. All right. And is the EnergySolutions at Clive, Utah, facility adequately regulated, in your opinion?

Mr. BRADFORD. Yes.

Mr. HALL. And since Utah DEQ has never expressed concern over the disposal of international material at Clive in the past and in fact has sent a note to the NRC on EnergySolutions' pending import application stating that, and I quote, "The Utah Radiation Control rules do not prohibit the disposal of low-level radioactive waste from foreign generators." Why all the fuss if that is the situation?

Mr. BRADFORD. Yes. You are correct in the statement and I believe it is contained in the NRC facts sheet as well that Utah has no technical arguments against the disposal because it would fit into the same type of radiological materials that are currently disposed. The question is really a policy question as to bringing in waste from a foreign entity. It was not envisioned originally when the facility was sited, and because the Board has a policy role to hear from the citizens of Utah and to incorporate the desires of the citizens into the policies of the State, that is why we have taken the position we have that we don't believe that this import is a good thing for the State of Utah.

Mr. HALL. And you work for Westinghouse?

Mr. BRADFORD. Yes, that is correct, my employment.

Mr. HALL. You are aware, are you not, that Westinghouse was granted a license by the NRC in June of 2007 to import low-level radioactive waste from Canada and dispose of the residual waste at—is that still Clive or Cleve? Clive.

Mr. BRADFORD. Yes. Yes, with respect to that, my understanding, and I have not been personally involved in that, is that that is U.S.-generated waste. It was simply sent to Canada for processing and cleaning of some of the material to be recycled and then returned so it was not an import so much as it was using a facility there to provide a service and then returning the material.

Mr. HALL. I thank both of you, and I yield back any time I may have.

Mr. BOUCHER. Thank you very much, Mr. Hall.

The gentleman from Utah, Mr. Matheson, is recognized for 5 minutes.

Mr. MATHESON. Well, thank you, Mr. Chairman. I thank both the witnesses.

Mr. Bradford, in the Board's March 10th letter to the NRC, you stated that you did not find any, and I quote, "legitimate reasons why Italy's radioactive material should cross international borders to be disposed of in the United States" and also, and I will quote, "that any country that has the technological capability of producing nuclear power within its borders should not seek to dispose of waste outside of them." Is that the Board's position today?

Mr. BRADFORD. Yes, it is.

Mr. MATHESON. When the Northwest Interstate Compact on Low-Level Waste Management met on May 8 to consider this import license, all eight member States voted against the acceptance of foreign waste into Utah and the compact. Upon instructions from the governor, Utah also voted against it. Is that correct?

Mr. BRADFORD. Yes.

Mr. MATHESON. And Mr. Chairman, if I could ask, the representative of the Northwest Compact was unable to attend the hearing but did send a letter explaining the position that the Northwest Compact took, and if I could ask for unanimous consent, I would like to have that letter and its attachments included for the record.

Mr. BOUCHER. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. MATHESON. I would also like to ask, since I am doing my housekeeping, I have a letter from Mr. Gordon to Mr. Klein at the NRC and a series of attachments associated with that and I would also like that inserted for the record. I ask unanimous consent——

Mr. BOUCHER. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. MATHESON. Thank you.

Mr. Bradford, Utah raised the same policy questions the Board raised on its March 10 letter to the NRC that countries which generated radioactive waste should take care of their radioactive waste. Is that correct?

Mr. BRADFORD. Yes.

Mr. MATHESON. In your testimony, you stated that your board, the Radiation Control Board in Utah, considered adopting a rule with regard to foreign waste. You considered adopting a rule to prohibit disposal of foreign low-level waste in Utah, and then you said you were advised that it would be a constitutional violation. Where did you get that advice?

Mr. BRADFORD. From the Utah Attorney General's office.

Mr. MATHESON. Is it a correct statement that as a radiation control board, you do not have the ability or regulatory authority to deny an application for low-level waste to come to your site based on whether it is domestic or whether it is imported?

Mr. BRADFORD. Yes, that is correct.

Mr. MATHESON. That is helpful. OK.

Ms. Doane, I appreciate your testimony as well. In the brief time I have left, I want to ask a couple of questions. In your testimony, you noted that the NRC does not take into account storage capacity. You focus on public health, safety, common defense and security when evaluating an import license. Is that accurate, what I am saying?

Ms. DOANE. Well, we would take into consideration storage capacity with respect to that particular import but not the national policy question.

Mr. MATHESON. OK. That is helpful. In terms of when you are looking at public health, safety, common defense, and security, is that how you would evaluate whether it is imported waste or whether it is domestic waste? Is that a consideration either way?

Ms. DOANE. That is a consideration.

Mr. MATHESON. So the fact that it is imported waste does not necessarily create a new level of consideration for you?

Ms. DOANE. No, it would be a new level of consideration if by some reason of its foreignness it raised a different kind of question.

Mr. MATHESON. But not the fact that it is being imported?

Ms. DOANE. No.

Mr. MATHESON. So it is the NRC's position that from a regulatory standpoint, your statutory authority, that you do not have the ability to deny an application based solely on the fact of whether it is domestic or whether it is imported?

Ms. DOANE. Yes, that is our position.

Mr. MATHESON. You noted that the Commission does not take a position on the bill we are discussing today and that, and I will quote from your testimony, “The pure policy question of whether as a general matter foreign waste should be permitted to take up space in U.S. disposal facilities is best addressed by Congress.” Is that still your position?

Ms. DOANE. Yes. I think we said Congress working with other agencies.

Mr. MATHESON. Right.

Ms. DOANE. Yes, that is our position.

Mr. MATHESON. Well, I would just say, I think Mr. Gordon and Mr. Whitfield agree, I think that you have helped. I appreciate that argument because I think it makes the case that this legislation is relevant for us to be considering today.

One more question because I have about 40 seconds left. There seems to be some confusion about what is classified as low-level radioactive waste. Is it accurate to say that metals intended for recycling or beneficial reuse in sealed sources are not classified as low-level waste and a processor doesn't need a specific waste import license to bring them in?

Ms. DOANE. With respect to some of the applications for reuse, they did need a specific license, but there is some material that is used for recycling that is exempted from our specific import licensing regulations but it should be clear that they are not exempt from our domestic possession license criteria. So it would have to be consistent with the possession license that a facility would have within the United States. So I just want to make that clear, that some things can come in as an exemption to our waste import regulations but not our domestic regulations.

Mr. MATHESON. Thank you.

Mr. Chairman, I will yield back.

Mr. BOUCHER. Thank you very much, Mr. Matheson.

The gentleman from Michigan, Mr. Upton, is recognized for 5 minutes.

Mr. UPTON. Well, thank you, Mr. Chairman. I am sorry that I had to step away for a few minutes but I am told that these questions have not been asked.

Mr. Bradford, do you know what percentage of the EnergySolutions Utah storage capacity would the Italian waste make up?

Mr. BRADFORD. I am not sure I can speak to that directly but I believe it is a very small percentage.

Mr. UPTON. Ten percent, 5 percent, 20 percent?

Mr. BRADFORD. Five percent or less.

Mr. UPTON. It is my—well, has international material been disposed of at Clive before this time or not?

Mr. BRADFORD. I believe there is testimony to the fact that small amounts of foreign waste have been disposed at Clive.

Mr. UPTON. And Ms. Doane, H.R. 5632, does that impact Canadian recycling services?

Ms. DOANE. It would depend on how the law would be implemented, but as Mr. Matheson was asking me questions about the exemptions to our waste prohibitions, it would also depend on how the material is classified.

Mr. UPTON. Is that——

Ms. DOANE. Is that the question that you are asking?

Mr. UPTON. Well, I just want to know whether Canadian waste had been accepted there.

Ms. DOANE. We have granted an application. We granted an application for reuse, and I believe that EnergySolutions has stated that it has disposed of some of that material in the Clive, Utah, site. That was a specific application which may when you implement, if you were to implement this legislation, would be prohibited but that it is difficult to say with specificity because some things would be exempt from the definition of waste and therefore could come into the country.

Mr. UPTON. And has the NRC ever denied a low-level import license up to this point?

Ms. DOANE. We have returned applications without action. For example, once the NRC heard from South Carolina that they would not accept the waste it was clear that there was not an appropriate facility for disposal, so it was returned without action.

Mr. UPTON. And that was where?

Ms. DOANE. It was coming in from Mexico. It was material coming in from Mexico.

Mr. UPTON. OK. Thank you.

I yield back.

Mr. BOUCHER. Thank you, Mr. Upton.

The gentleman from Louisiana, Mr. Melancon, is recognized for 8 minutes.

Mr. MELANCON. Thank you, Mr. Chairman.

Let me see if I can figure out where this all started, the origin of importation. Is that just something that department itself established? Was it some agreements with other countries, i.e., trade agreement, WTO? How did we get to where people are wanting to send low-level nuclear waste to the United States for disposal?

Ms. DOANE. This is not something new. This has been going on for decades where material has been coming in; however, not in this volume. So the need really created the opportunity for the United States or, I guess, maybe the disposal activities in the United States were solicited from other countries that didn't have disposal facilities or for other reasons we were better capable of handling certain waste because of our technical expertise. So that is where the origin is. So the impetus was behind a need to take care of waste, and more recently there has been a greater focus on ensuring adequate treatment of waste and so I would imagine that is what spurring the interest now.

Mr. MELANCON. There was mention of several countries that don't have any waste disposal.

Ms. DOANE. That is right.

Mr. MELANCON. Is that because they choose not to, their people don't want them to, or they figure it is easier to send it to somebody else?

Ms. DOANE. I think you will probably find there are many reasons why a country would not have a disposal facility. Some of it would be technical expertise within the country to adequately open and operate a facility of that type. Some countries even with the expertise may not have the physical capacity and also the financial aspects of trying to open a facility.

Mr. MELANCON. So you are talking about sites. How many States allow for low-level waste disposal at this time?

Ms. DOANE. Right now we know that for direct disposal, the Clive, Utah, site is available for Class A——

Mr. MELANCON. Is that the only one in the country?

Ms. DOANE. For Class A low-level waste that would come directly in for disposal.

Mr. MELANCON. OK. And——

Ms. DOANE. I want to be clear about this.

Mr. MELANCON. How many disposal sites——

Ms. DOANE. There are three disposal sites altogether but there is—I am sorry. Let me let you finish.

Mr. MELANCON. There are three sites altogether in Utah or all together in the United States?

Ms. DOANE. No. In the United States—we have submitted a table into the testimony so I think there is some confusion and I apologize. I might be creating that.

Mr. MELANCON. Do you know what that number is?

Ms. DOANE. There are three sites. You will see the Clive, Utah site; the U.S. Ecology in Richland, Washington; and Waste Control Specialists in Texas.

Mr. MELANCON. OK. So there are three sites that take this type of material presently. I can remember a number of years back, I went to Makilladora in Tijuana and they were so proud that they were bringing in distilled water that they purchased in the United States and then after they used it in the process, it was wastewater so they were sending it back to us to take care of instead of—they were making the money and we were taking care of their byproducts. So Louisiana has none to your knowledge?

Ms. DOANE. No.

Mr. MELANCON. I just wanted to make sure that we are not on the list because a number of years ago there was what affectionately known as the poo-poo choo-choo that showed up with waste from all over the United States, mostly medical waste, and they wanted to dispose of it all in Louisiana. So I understand what is going on with the folks in Utah.

So the people that are looking at disposal, this is a commercial business venture that is making the request? Is that correct?

Ms. DOANE. Yes.

Mr. MELANCON. OK. And if granted, this license could be followed by other requests for other imports from other countries?

Ms. DOANE. Yes.

Mr. MELANCON. Ad infinitum?

Ms. DOANE. Yes.

Mr. MELANCON. If someone agrees to take it, it would be. You mentioned Mexico as sending in. What type of material is that we are getting in from Mexico?

Ms. DOANE. I can tell you offhand that there was laundry from their power plant. Laundry that was used by their workers was sent in for washing, and sometimes through that process there is waste resulting from the processing. So that is an example.

Mr. MELANCON. That is interesting. I thought I only had the nuclear laundry. My clothes come back all busted up.

When the NRC established its licensing system for imports, it said it did not anticipate frequent or large imports. It said the imports might be for research purposes or to bring back waste from use of U.S. materials. But that isn't what the EnergySolutions is proposing or what the NRC is anticipating, is it?

Ms. DOANE. You state correctly what was in the statement of consideration. That was an example. But this is different than what we were anticipating at that time.

Mr. MELANCON. That is all I have got at this time. I would reserve the balance of my time, Mr. Chairman. I yield back.

Mr. BOUCHER. Thank you, Mr. Melancon.

The gentleman from Kentucky, Mr. Whitfield, is recognized for 5 minutes.

Mr. WHITFIELD. Thank you, Mr. Chairman.

Ms. Doane, I notice in your testimony that you indicate that in 1954, at least my understanding was, that was the first law adopted in the United States regulating imported waste. Is that correct?

Ms. DOANE. Yes.

Mr. WHITFIELD. So prior to that, any waste that came in, it was not regulated in any way. Is that correct?

Ms. DOANE. I don't really know about what happened before 1954 because——

Mr. WHITFIELD. OK.

Ms. DOANE [continuing]. There probably wasn't any.

Mr. WHITFIELD. OK, but——

Ms. DOANE. It could have been imported through the weapons program or something like that but not a civilian program, no.

Mr. WHITFIELD. OK. And you mentioned earlier that applications to bring in low-level waste from another country, that this application is the application for the largest amount that has been requested. Is that correct?

Ms. DOANE. Yes, that is correct.

Mr. WHITFIELD. And what is the total amount that is being requested?

Ms. DOANE. We put in our testimony that approximately 20,000 tons would come into the United States, but, and let me be very precise here, it would be—and you have U.S. Ecology where you can ask more specific questions on the second panel—but one-third of it would be recycled, two-thirds of it would then be processed, and of that, I believe 1,600 tons to be disposed of in Clive, Utah.

Mr. WHITFIELD. Now, in the document that was submitted with your testimony, it talks about maximum volume that would be authorized for importation and then it says ft3. It says 1 million there but——

Ms. DOANE. Cubic feet, yes, sir.

Mr. WHITFIELD. It actually is 20,000 pounds. Is that correct?

Ms. DOANE. No, 20,000 tons.

Mr. WHITFIELD. Twenty thousand tons?

Ms. DOANE. That is right, so I think the 1 million refers to cubic feet. That is why——

Mr. WHITFIELD. So it is 1 million cubic feet. OK.

Ms. DOANE. There are a lot of numbers floating around here.

Mr. WHITFIELD. So normally when it comes in, the real measurement is in tons?

Ms. DOANE. Yes. When it——

Mr. WHITFIELD. OK. And this is the largest amount that has ever come in?

Ms. DOANE. Yes, that we know of, yes.

Mr. WHITFIELD. Now, I think under the EnergySolutions application they want to process this material in Tennessee. Is that correct?

Ms. DOANE. Yes, that is correct.

Mr. WHITFIELD. Now, you have to look at where it is going to be processed before you issue a license as well? That is part of your review process?

Ms. DOANE. Yes.

Mr. WHITFIELD. OK. And you have indicated that the regulatory commission has denied some importation requests. Is that correct?

Ms. DOANE. Yes, we have returned them without action, yes.

Mr. WHITFIELD. And the last one that you did, what was the reason that it was returned without action? Tell me again.

Ms. DOANE. Well, there have been several, and I am not sure of the exact dates, which one came first, but I can tell you that the one that I was referring to as an example was where the State of South Carolina said that it would not allow the residual waste to go into its facility and so the NRC returned the import application without action.

Mr. WHITFIELD. Now, just as a layman, if you were talking to a rotary club in some small town, how would you describe the difference between high-level nuclear waste and low-level nuclear waste?

Ms. DOANE. Well, I think there could be a lot of definitions but I think for the layperson, it is most easily understood to think about spent fuel from power plants as high-level waste and just about everything else as low-level, but there are lots of distinctions to that, but from a layperson's perspective, I think that is the easiest way to understand it.

Mr. WHITFIELD. And we are talking only about low-level waste here, correct?

Ms. DOANE. We are talking about low-level waste, and of that, we are talking about Class A, which is the lowest level of low-level waste.

Mr. WHITFIELD. Are there three different classes?

Ms. DOANE. Three plus greater than Class C.

Mr. WHITFIELD. Now, Mr. Bradford, I read somewhere, or maybe it was in Ms. Doane's testimony, that a letter that was written by the Northwest Compact alleged that this waste would be disposed of in an illegal site or at a place where they did not have the legal authority to do it. Is my memory wrong about this or——

Mr. BRADFORD. I am not familiar with the statement that you are referring to.

Mr. WHITFIELD. Let me just find this letter here. OK. It says on May 8, the Northwest Compact notified the NRC by letter, actually on May 15, that should it choose to issue the import license, it is doing so with the understanding there is no facility within the Northwest Compact region that is authorized to legally accept this waste for disposal. So Ms. Doane, is that correct?

Ms. DOANE. I am sorry, sir. Could you——

Mr. WHITFIELD. On page 8 of your testimony, it says the Northwest Compact notified the NRC by letter that should it choose to issue the import license, it is doing so with the understanding there is no facility within the Northwest Compact region that is authorized to legally accept this waste for disposal. The Clive, Utah, plant is legally authorized to accept it, isn't it, for disposal, or am I missing something?

Ms. DOANE. No. The compact is asserting jurisdiction over the Clive, Utah, facility, and in its opinion it is stating that before it would allow waste to come in, that the matter would have to come before the compact, and since it has not, if we were to allow it, we are doing so without——

Mr. WHITFIELD. So they are making a legal assertion that it cannot be disposed of in this instance without their approval as well? Is that correct?

Ms. DOANE. Yes, that is what they are saying.

Mr. WHITFIELD. And do you have an opinion on that?

Ms. DOANE. Well, there has been a lawsuit filed by—you are probably well aware of this. There has been a lawsuit filed by EnergySolutions and that lawsuit asserts that they don't have jurisdiction over their facility. So now there is that open issue with the courts, and the Department of Justice speaks on behalf of the Federal government in district court cases such as this so we have been coordinating with the Department of Justice on this matter.

Mr. WHITFIELD. My time is expired, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Whitfield.

The gentleman from Washington State, Mr. Inslee, is recognized for 5 minutes.

Mr. INSLEE. Thank you. I want to ask a question. I was reading a newspaper article about this issue that was talking about some NRC comments about potential licensing. It's a Seattle PI article dated May 8 and it said a spokesman for the U.S. Nuclear Regulatory Commission which is reviewing the import license doubts that the unanimous vote of the compact will kill the application. "They could say we would still like to bring the material for processing in Tennessee and dispose of it in some other way, presumably exporting the rest of it back to Italy, NRC spokesman Dave McIntyre said in a phone interview." From that, are we to take it that the NRC has essentially said if the waste in fact was going to Utah ultimately, then it would not be licensed for import, but that if it was headed for processing in Tennessee and then eventual disposition somewhere else, then it may be? Can anybody give me any insight on that?

Ms. DOANE. At this point in time, it wouldn't be appropriate for us to resolve this one way or another, as I have said, because the comment period is still open. Whether we are going to grant or deny the license, of course, is still open until the end of the comment period and then a decisionmaking time period after that. So I am not free to discuss that issue, the denial or granting. What the question is referring to are different processes that are requested under the application. So it is for ultimate disposal but there are aspects of the license such as processing that are being parsed in the application. However, right now the only application that we have before us is to bring the waste in, process it and dispose of it in the Clive facility. That is how the application reads.

Mr. INSLEE. So I guess the question is, why isn't the agency taking the position that would not be allowed? The Northwest Compact is authorized by statute. Article IV, section 2, specifically says that no facility located in any party state may accept low-level waste generated outside the region comprised of the party States except as provided in Article V. Article V specifically says you can't do it with their approval. They didn't approve. Why is this an issue?

Ms. DOANE. The case is still open. As part of its process the NRC gives an opportunity to request a hearing and also a time period for public comment, and we don't make a decision until that time would run to give ample opportunity. And in this case, we even extended it at the request of the public to hold our decision open until a longer period of time. That time period is not up until June 10 so we have not made a decision one way or another.

Mr. INSLEE. Can you tell us whether you respect the law or not? That is kind of a basic question. It shouldn't take a lot of public comment. I mean, what is the NRC's position on this issue, whether the compacts exist and they have jurisdiction or somehow they are some figment of somebody's imagination?

Ms. DOANE. OK. Well, yes, I understand your question. The compact has asserted its jurisdiction and we are aware of that, and we are aware of every—all the, quote, statements made by the compact and their position. It is very clear. We understand it. At the same time, EnergySolutions has filed a lawsuit questioning their jurisdiction. The NRC is monitoring this.

Mr. INSLEE. Well, monitoring is one thing, but it is a Federal agency that should be able to take a position what Federal law is, and I don't quite understand the agency's reluctance to take a position of whether the interstate compact law is a law that is authorized by Congress and deserves to be respected or whether it should not be. It seems to me you have a few attorneys to make that decision and the agency should make a decision and it doesn't take 100 letters or e-mails from Tukwila, Washington, to advise you about that. It is on the statute. It is on the books. Why can't the agency take a position and say that the compact is the law, you got to follow it, and we don't allow licenses that violate the compact? Why can't you do that without 100,000 comments?

Ms. DOANE. I guess I have to say, it could be one outcome but it wouldn't be appropriate for me to resolve this today because the comment period hasn't closed yet.

Mr. INSLEE. Well, if someone had a proposal for licensing that would import killers from Brazil that would—their import license requested they come and commit homicide in the United States, would you wait for the public comment period to take a position? I don't understand this.

Ms. DOANE. Well, it is well within our authority to take immediate action——

Mr. INSLEE. Then why don't you take an immediate position that the compact authorized by the Congress is law of the United States and ought to be followed? Why can't the agency tell us today, we are here to listen to your position? Your position as far as I can tell is like hey, whatever.

Ms. DOANE. Well, then I am not getting my position across clearly enough so let me try again. Our position is that our decision will be made based on common defense and security and public health and safety and no material will enter the United States unless we can clearly decide that issue. At this time there is no material entering the United States nor is there any immediacy——

Mr. INSLEE. Well, what you left out of your criteria, you mentioned the common defense, you forgot to mention the law, I think. Now, is that implicit? Because the law, as I read it, says the compact should be followed. Congress gave them the authority. They quite clearly, there is no ambiguity about this, decided not to allow it pending at least some further action. I mean, do I implicitly say you left out the law but you do intend to respect it or——

Ms. DOANE. We absolutely intend to respect the law.

Mr. INSLEE. That is progress.

Ms. DOANE. And there is a lawsuit filed right now and very able judges will decide this matter, and the NRC will absolutely follow the law as it is decided in that matter.

Mr. INSLEE. I will just tell you, speaking as one Congressman, I am not satisfied with that. The agency has responsibility to follow the law and it has an obligation to follow the law the best it understands it and then you're just punting to people writing letters to it eventually is not satisfactory. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Inslee.

The gentleman from Tennessee, Mr. Gordon, is recognized for 5 minutes.

Mr. GORDON. First of all, I want to thank you for being here today. I know that you are getting questions from left and right and you are doing a good job trying to answer them. Let me see if I can summarize some things. You correct me if I am wrong somewhere. I am trying to use both your testimony as well as some statements that the agency has made. First of all, you stated that there have been 13 prior applications for foreign radioactive waste but I understand that only four of those really have actually been disposed of here. Also that the Italian waste, the 20,000 tons, is approximately 25 times bigger than the largest one in the past.

Ms. DOANE. I haven't worked out how many times larger it is.

Mr. GORDON. I will just remind you, it is 770,000 pounds, and this is 20,000 tons, so it is much larger than anything in the past.

Now, also, correct me if I am wrong, when South Carolina this summer stops accepting radioactive waste from outside its compact area, then there will be 36 States in the United States, 36 States including Louisiana, Virginia, Michigan, Texas, Tennessee that will have no other place in the world to take their low-level radioactive waste. Is that correct?

Ms. DOANE. At this time. I mean, we know of countries that don't have laws that prohibit but whether those facilities would take it is, I can't——

Mr. GORDON. So——

Ms. DOANE. As far as in the United States, that would be correct, yes.

Mr. GORDON. So there is no other place in the world that can take it? OK. And, you know, there are implications about how is your domestic industry going to be able to continue if there is no place to put their low level.

Now, and here is the other dilemma that we have got into, and again, I am going to try to summarize, so if I am inaccurate, you let me know. In your testimony, you say that whether or not we should accept general foreign waste is really a public policy decision that ought to be made by Congress, not NRC, and that you have to do your basic safety tests, and it really is up to the compacts to decide whether at the end of the day they want to take the waste or not. Is that correct? I mean, I can be more specific but that is the general concept.

Ms. DOANE. That is the general concept but the national policy decision could be decided by many factors. The compacts have responsibility for determining whether or not they are going to take waste outside the compact.

Mr. GORDON. Yes, but where we are now when it comes to foreign waste coming in, you don't make a policy decision about that?

Ms. DOANE. That is right.

Mr. GORDON. But you say, and again, I can read it to you here. You say the NRC, however, recognizes the legal authority of the relevant host State and low-level radioactive waste compact to accept or reject low-level radioactive waste for disposal or management in the compact region. Is that correct?

Ms. DOANE. That is correct.

Mr. GORDON. OK. So once again, concerning foreign waste, you are saying NRC, they can't say anything about whether it should come in or not, it is only on that safety issue, and that it is up then to the local compact to decide?

Ms. DOANE. With regard to the health and safety decision, States that license the facilities can make a determination.

Mr. GORDON. I am talking about foreign waste coming in.

Ms. DOANE. Yes.

Mr. GORDON. So you are saying——

Ms. DOANE. Even with the—because it is an Agreement State, the State of Utah could make a decision about whether the facility is appropriate for disposal, even though it is foreign waste, they don't abdicate their responsibility.

Mr. GORDON. Exactly. What I am saying is, you are saying you can't make a judgment about the foreign waste.

Ms. DOANE. That is right.

Mr. GORDON. OK. But that the local compacts can, and that is where it has to be determined?

Ms. DOANE. What we say is—I want to be very precise here because——

Mr. GORDON. OK, let us be precise.

Ms. DOANE [continuing]. There is a lawsuit. So what we are saying is that we absolutely consult with the compacts and we have a very open public process. We actually issued letters to the States in the compacts so that all of these views can come into the agency, and in this case, there is a controversy——

Mr. GORDON. I don't want to talk about this case. I am talking about the general. Now, please let me, just tell me——

Ms. DOANE. I am sorry.

Mr. GORDON. I am going to say it and then you explain how I am not right——

Ms. DOANE. OK. I am sorry.

Mr. GORDON [continuing]. If that is the case. NRC once again when it comes to foreign waste coming in, you only look at the safety issue of it, you don't look at the public policy of whether we should accept foreign waste and what impact it will have on storage. OK. Then so it is up to the local compacts, really just those three, to determine whether or not they are going to take that waste. All right. So that is the only safety valve that we have, stopping the foreign waste coming in, is whether you say for whatever reason it wouldn't be safe and the local compacts, yet EnergySolutions is suing—the local compact said we don't want it, don't bring it in, and now they are being sued. So, where are we?

Ms. DOANE. So you want me to tell you how that is right, right?

Mr. GORDON. No, just tell me if that is wrong.

Ms. DOANE. I think it is a very complicated area and I think you have recognized where the frustrations are on our part, not frustration but——

Mr. GORDON. Let me move on. We are really—it is pretty simple. You are saying it is up to the States. The States are saying we don't want it and EnergySolutions is then saying we are suing the States because we don't think you have the authority. In other words, nobody has that authority.

So let us go, and Mr. Bradford, in a very masterpiece of American literature here, you state very clearly concerning radioactive waste that any country that has the technological capability of producing nuclear power within its borders should not seek to dispose of its waste outside of them.

Mr. BRADFORD. Yes, that is the position of the Board.

Mr. GORDON. And the Board has voted not to accept it?

Mr. BRADFORD. Yes.

Mr. GORDON. And now you are being sued by the EnergySolutions saying you have got to take it, it is our property, we are going to do with it what we want.

Mr. BRADFORD. Well, I believe the lawsuit is against the compact.

Mr. GORDON. The compact, yes.

Mr. BRADFORD. The Utah——

Mr. GORDON. So again, here is where we are. NRC can't do anything. Those folks that can do something now are being sued to stop them from doing anything, and I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Gordon.

That concludes the—oh, Mr. Shimkus. The gentleman from Illinois is recognized for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. I don't think I will take that long. I want to appreciate the thoughtfulness of Mr. Whitfield, Mr. Matheson, and Mr. Gordon. They are all sincere public policy guys that get in the weeds and try to address concerns, so my hat is off.

Mr. Bradford, does Utah have any nuclear power plants?

Mr. BRADFORD. No.

Mr. SHIMKUS. And you are in the Northwest Compact, right?

Mr. BRADFORD. Yes.

Mr. SHIMKUS. The ruling—I think that my concern, the interstate commerce clause is kind of a sacrosanct issue of this committee and this new constitution that we have had that lasted about 219 years. I tell students that the interstate commerce clause has really helped two States from going to war and established the principle that is further jurisdiction. Is there a concern—your comment, which is somewhat troubling, and I understand this is from Italy but countries that generate low-level nuclear waste should manage their own waste is kind of—I am paraphrasing. I just scribbled that down. Is that the same thing for States?

Mr. BRADFORD. Well, it is certainly not the case today.

Mr. SHIMKUS. Should it be?

Mr. BRADFORD. Well, the Board hasn't taken a position on that except to say that we do say in our letter that we encourage the NRC and Congress to look at our current system because the current system today sends a vast majority to the State of Utah and we would like to see others bear some of the burden.

Mr. SHIMKUS. So you are hinting that it probably wouldn't be bad policy for States that generate would be States that dispose?

Mr. BRADFORD. Yes.

Mr. SHIMKUS. I think that is where you are going to have problems because we fought this battle here numerous times on just regular waste, and you have—I am from downstate Illinois, 30 rural counties. People don't like Chicago waste. People don't like St. Louis waste. There is an interstate commerce clause. I know this is low-level nuclear waste but it is the interstate commerce clause that is of concern and that is why I throw it out.

Mr. MATHESON. Would you yield just a second, Mr. Shimkus?

Mr. SHIMKUS. Yes, I would be happy to.

Mr. MATHESON. And I am sure, Mr. Gordon and Mr. Whitfield agree with me, we in no way are trying to raise questions about limiting it to a State. I just want to make you clear as to the authors of the bill, that we are not trying to question the interstate commerce clause at all. This strictly has to do with imports from overseas. It wouldn't——

Mr. SHIMKUS. But it probably segues into——

Mr. MATHESON. I just wanted to share that with you.

Mr. SHIMKUS. Yes, no, and I am not—I am just thinking this through after listening to the hearing, and it is addressing the compact and the compact does allow you to cross over State lines. I am not trying to cause trouble. I am just——

Mr. GORDON. Mr. Shimkus, I think you have really hit upon the real threshold issue here, once again, on the interstate commerce issue. Once again, the NRC is saying they really don't have the authority to regulate foreign waste coming in, it should be done by the local authorities. The local authorities now are saying they don't want it, but EnergySolutions is suing them saying by virtue of interstate commerce, you have to take it. And so you are making the argument that their case is right and it may very well succeed, and that is why there needs to be a national law to stop foreign waste coming into this country and taking up finite capacity because in all likelihood EnergySolutions might very well win their lawsuit on interstate commerce issue. There is no other way to deal with this.

I yield back.

Mr. SHIMKUS. I do appreciate it. I will just tell you, Illinois, not in my area, but it is a big nuclear power State. We have great research facilities. Our low-level nuclear waste is going somewhere. I bet a lot of it is going to Clive. It is OK, but I think there is a concern that we ought to—maybe the legislation is clear and precise but you know how it is here, the camel's nose under the tent. I know communities that would like to prohibit anything coming in to their community and I have heard the arguments that, if you generate it, you should be able to store it, and I would just raise that as a concern, and with that, my time is expired, Mr. Chairman. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Shimkus.

There are no further questions for this panel of witnesses, and with the subcommittee's thanks, we will excuse you at this time.

We now turn to our second panel of witnesses: Mr. Steve Creamer, the chairman and chief executive officer of EnergySolutions and Mr. Gene Aloise, the Director of Natural Resources and Environment for the United States Government Accountability Office. Mr. Aloise is being joined at the witness table by Mr. Feehan, who is the Assistant Director for Natural Resources and the Environment at the Government Accountability Office.

Without objection, the prepared written statements of the witnesses will be made a part of the record. We would welcome your oral summary and ask that that be kept to approximately 5 minutes.

Mr. Creamer, we will be happy to hear from you.

STATEMENT OF R. STEVE CREAMER, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, ENERGYSOLUTIONS

Mr. CREAMER. Thank you, Mr. Chairman, members of the subcommittee. I am Steve Creamer, chairman and chief executive officer of EnergySolutions. It is an honor for me to appear before you today.

I was going to acknowledge Congressman Matheson, who is my Congressman, and I appreciate him very much. He does a great job.

EnergySolutions, headquartered in Salt Lake City, Utah, is a nuclear services company with operations throughout the United

States and around the world. EnergySolutions is committed to helping the United States achieve energy independence, reduce carbon emissions, and protect the environment. We are the world leader in the safe recycling, processing, transportation and disposal of nuclear materials. EnergySolutions believes in safety first: safety for our workers, safety for our environment, and safety for the communities in which we operate.

We own and operate several state-of-the-art facilities. In Oak Ridge, Tennessee, we have the Bear Creek facility that has one of two metal melt facilities in the world. This facility has recycled metals, both domestic and international, for over 12 years. The Bear Creek facility has recycled over 56,000 tons of metal. Of this amount, over 1,000 tons has come from international sources. The recycled metals are used to produce shield blocks for the reuse at nuclear and accelerator facilities throughout the world. Shield blocks made at our Bear Creek facility protect the neutron source at DOE's Oak Ridge National Laboratory in Tennessee. Many of the metals in these shield blocks came from international metals that were recycled in Tennessee. Low-level radioactive material from nearly all 104 domestic nuclear power plants is sent to Bear Creek for processing with residual Class A waste disposed of at our Clive, Utah, facility. We also process material at Bear Creek from the Departments of Energy and Defense, the Tennessee Valley Authority, doctors, hospitals and research facilities.

Our Clive facility has been in operation since 1988. It is a privately owned Class A low-level radioactive waste disposal site that has received waste from international generators for over 8 years. The Clive facility, which has over 30 years of capacity, has enough capacity to take all of the Class A waste from the 104 domestic nuclear power plants and still have approximately 50 million cubic feet of remaining capacity. According to the GAO, disposal of—and this is quoted out of their 2004 report—disposal availability of Class A waste is not a problem in the short or longer term. EnergySolutions is the leading U.S. company with experience and technology to recycle spent nuclear fuel. We are exploring opportunities to site low-level waste disposal facilities abroad to help those countries address their waste management issues.

In order to meet the growing energy demand in the United States and around the world, a variety of energy sources must be utilized including solar, wind, biofuels, and nuclear. Nuclear is a clean, safe, reliable, non-carbon emitting energy source. I would like to address the quote from Mr. Gordon's remarks from the SEC document. EnergySolutions is pursuing opportunities overseas. Most of these opportunities are for work overseas. Over two-thirds of our revenue today comes from the United Kingdom from work that is done in the United Kingdom, not bringing waste back to the U.S. We try to do that around the world. The United States needs companies like EnergySolutions to safely and responsibly manage the recycling, processing and disposal of nuclear materials. We should stand ready to provide technical solutions to those countries that are in need. This does not mean that EnergySolutions or any other U.S. company should be responsible for disposing of the world's nuclear waste.

EnergySolutions is committed to maintaining Clive's capacity for domestic customers. This is why we offered to self-impose a limit of disposal of international material to 5 percent of our remaining capacity at Clive. We will not under any circumstance use Clive in a manner that would adversely affect our U.S. customers either now or in the future. You have my commitment on that.

Our pending application with the NRC to import low-level nuclear material from Italy, process it at our Bear Creek facility in Tennessee, and dispose of a small amount of the residual Class A material at our Clive facility in Utah is consistent with all laws and regulations, consistent with past practices, consistent within limited situations utilizing our world-class facilities to solve these challenges.

The Italian material—metals, paper, plastic, clothing—is exactly the same type of material we handle every day from the domestic nuclear industry at our U.S. facilities. Before any material would leave Italy, EnergySolutions personnel would subject it to extensive characterization to ensure that the imported material meets the processing and disposition requirements of the Bear Creek and Clive facilities. The residual waste from processing at Bear Creek would be Class A waste and would be disposed of at Clive. Approximately one-third of the Italian material is metal that would be recycled and formed into shield blocks. The remaining material would be incinerated or volume reduced. Only about 8 percent of the material would be disposed of at Clive. This is way, way less than 1 percent of what we take at Clive each year—way, way, less than 1 percent. No material would be disposed of in Tennessee. No material would be orphaned in the United States. No spent fuel would be imported into the United States. Ninety-nine point nine nine eight percent of the radioactivity would remain overseas.

Mr. Chairman, I have spent my entire career cleaning up the environment, everything from the Oak Ridge National Laboratory in Tennessee to the mill tailings in Moab, Utah, to the enrichment facility in Paducah, Kentucky. EnergySolutions is committed to continuing to clean up the nuclear legacy of the past and help the United States achieve energy independence by ensuring a bright future for nuclear power. I am happy to answer your questions.

[The prepared statement of Mr. Creamer follows:]

Testimony of R Steve Creamer
Chairman and Chief Executive Officer, Energy*Solutions*
Energy and Air Quality Subcommittee
House Energy and Commerce Committee
May 20, 2008

Mr. Chairman, Members of the Subcommittee, I am Steve Creamer, Chairman and Chief Executive Officer of Energy*Solutions*. It is an honor to appear before you today. I would like to acknowledge my home state congressman, Jim Matheson.

Energy*Solutions*, headquartered in Salt Lake City, Utah, is a nuclear services company with operations throughout the United States and around the world. Energy*Solutions* is committed to helping the United States achieve energy independence, reduce carbon emissions, and protect the environment. We are a world leader in the safe recycling, processing, transporting and disposal of nuclear material. Energy*Solutions* believes in "Safety First." Safety for our workers. Safety for the environment. Safety for the communities in which we operate. Energy*Solutions* has been recognized by OSHA for safety excellence. We transport nuclear materials over 8 million miles per year and we hold the highest rating from the U.S. Department of Transportation.

Energy*Solutions* provides integrated services and solutions to the nuclear industry, the federal government, doctors, hospitals and research facilities. We specialize in – recycling, processing, disposal, decommissioning, environmental restoration, transportation, and fuel management. We have over 100 Federal and State licenses and permits and we own and operate several state-of-the-art facilities.

In Oak Ridge, Tennessee we have the Bear Creek facility which has one of two metal-melt facilities in the world. This state-of-the-art facility has recycled metals, both domestic and international, for over 12 years. The Bear Creek facility has recycled over 56,000 tons of metals. Of this amount, over 1,000 tons has come from international sources. The recycled metals are used to produce shield blocks for reuse at nuclear facilities and accelerator facilities throughout the world. Shield blocks made at our Bear Creek facility protect the Spallation Neutron Source at the Department of Energy's Oak Ridge National Laboratory in Tennessee. Many of the metals in these shield blocks came from international metals that were recycled in Tennessee.

The Bear Creek facility also has a world-class incinerator and the ability to volume reduce material 200 to 1 so that the amount of waste transported and disposed is minimized.

Low-level radioactive material from nearly all 104 domestic nuclear plants is sent to Bear Creek for processing, with the residual waste disposed at our Clive, Utah facility. We also process material at Bear Creek from the Department of Energy, Department of Defense and the Tennessee Valley Authority.

Our Clive, Utah facility, which has been in operation since 1988, is a privately owned Class A low-level radioactive waste disposal site. Class A low-level waste from international generators has been disposed at Clive for over eight years. Clive has enough capacity to take all of the Class A waste from the 104 domestic nuclear plants, from both on-going operations and the ultimate decommissioning of every plant, and still have approximately 50 million cubic feet of capacity remaining. According to the GAO, in testimony before Congress in 2004, "disposal availability of class A waste is not a problem in the short or longer term." [1]

The Clive facility has disposal capacity for at least the next 30 years, assuming future receipts are equal to 2007. This does not take into account that many of the nuclear plants will get license extensions and therefore will delay decommissioning of some of these plants. Nor does it take into account the technical advancements that will take place over the years which will likely reduce the volume of waste to be disposed.

Energy*Solutions* is helping clean up the legacy waste at many of the Department of Energy sites including Moab, Oak Ridge, Paducah, Hanford, Savannah River, Los Alamos and West Valley. Energy*Solutions* was a major part of the team that successfully cleaned up and closed the Rocky Flats and Fernald sites.

Energy*Solutions* is also the leading U.S. company with experience in recycling spent nuclear fuel. We have the exclusive license in North America to the recycling technology that is employed at the Sellafield facility in the United Kingdom. Addressing the issue of spent nuclear fuel management is one of the keys to helping make the nuclear renaissance a reality. Having the capability in the United States to recycle spent fuel is essential to solving the issue of having spent fuel stored at nuclear plants throughout the United States.

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[1] Statement of (Ms) Robin M. Nazzaro, Director Natural Resources and Environment, Before the Committee on Energy and Natural Resources, United States Senate, September 30, 2004, page 15.

Overseas, Energy*Solutions* manages 22 nuclear reactors in the United Kingdom (U.K.), including four plants that generated over 5,000 gigawatt hours of electricity for the U.K. in 2007. Eighteen of these plants are being decommissioned by Energy*Solutions*. We are also exploring opportunities to site low-level waste disposal facilities abroad in order to help other countries address their waste management issues.

The Energy Information Administration is projecting that the world's energy consumption will grow by 57% over the next 20 years. In order to meet the growing energy demand in the United States and around the world a variety of energy sources must be utilized including solar, wind, biofuels and nuclear. We must also increase conservation and energy efficiency.

Nuclear energy is a clean, safe, reliable and non-carbon emitting source of energy. It must play a growing role in meeting our energy demand. Energy*Solutions*' mission is to help the United States achieve energy independence and security. We can help accomplish this by cleaning up the nuclear waste legacy of the past and by helping with the current waste management issues to pave the way for nuclear power to play a greater role in solving the energy crisis that faces us today.

In order for the United States to be a leader in the energy field it must participate and compete on the global stage. In today's global economy there are few barriers to trade in international markets. Oil, copper, and gold are all traded on the world market. Eighty-five percent of the fuel used in U.S. nuclear reactors is imported. Our computers and plastic bottles that we put at the end of our driveways in the recycling bins are recycled overseas. The hazardous waste that is the byproduct of the recycling process stays in

China and other foreign countries for disposal. The waste is not sent back to the United States for disposal.

The United States needs companies like Energy*Solutions* to safely and responsibly manage the recycling, processing and disposal of nuclear material. We should stand ready to provide technical solutions to those countries that are in need. This does not mean that Energy*Solutions*, or any other U.S. company, should be responsible for disposing of the world's nuclear waste.

Energy*Solutions* is committed to maintaining Clive's capacity principally for the domestic nuclear power industry and our other domestic customers. We understand that Clive is a national asset and we will protect it. This is why we offered to self-impose a limit on the disposal of international material to 5 percent of the remaining capacity at Clive. We will not under any circumstance use Clive in a manner that will adversely affect its capacity to fully serve our United States customers, either now or in the future. You have my commitment on this.

Our pending application with the Nuclear Regulatory Commission (NRC) to import low-level nuclear material from Italy, process it at our Bear Creek facility in Tennessee, and dispose of a small amount of residual Class A material at our Clive, Utah facility is consistent with all applicable laws and regulations, consistent with past practices, and consistent with, in limited situations, utilizing our world class facilities to solve complex challenges.

The Italian material – metals, paper, plastics, resins, clothing – is the same type of material that we handle every day from the domestic nuclear industry at our U.S. facilities. Before any material would leave Italy, Energy*Solutions* personnel would subject it to extensive waste characterization to ensure that all of the imported material met the processing and disposition requirements of the Bear Creek and Clive facilities. Only material that met our license requirements would be imported. Since the Clive facility can only handle Class A waste, we would ensure that only material that met the Clive waste acceptance criteria after processing would be imported. According to the NRC regulations, waste is not classified as A, B or C until it is in its final form and packaged for disposal. Once the material was processed at the Bear Creek facility, the residual waste would then be packaged and classified for disposal. The residual waste from the processing at Bear Creek would be LLRW Class A waste that would then be disposed at Clive. All material would be packaged and shipped in accordance with the International Atomic Energy Agency regulations and the requirements of the U.S. Department of Transportation. Approximately one-third of the Italian material is metal that would be recycled and formed into shield blocks. The remaining material would be incinerated and volume reduced. Only around eight percent of the material would be disposed at the Clive facility. This is less than one percent of what we dispose at Clive each year. No material would be disposed in Tennessee. No material would be orphaned in the United States.

American companies designed three of the four nuclear reactors in Italy. Over 80% of the uranium used to make the fuel for these reactors was mined in the United States. Some was mined in Utah and enriched in Kentucky and Ohio. The Italian spent nuclear fuel, which contains 99.998% of the radioactivity, has either been sent to the United Kingdom for recycling or will be sent to France for recycling. No spent fuel will be imported to the United States.

I have full faith in the Nuclear Regulatory Commission and believe that the NRC has the scientific and technical expertise to continue to make decisions on import license applications. I do not think that the NRC should be stripped of this responsibility and therefore do not believe that H.R. 5632 is warranted.

Mr. Chairman, I have spent my whole career cleaning up our environment - everything from the Oak Ridge National Laboratory in Tennessee, to Moab, Utah to Paducah, Kentucky. Energy*Solutions* is committed to continuing to clean up the nuclear legacy of the past and to help the United States achieve energy independence by ensuring a bright future for nuclear power.

I am happy to answer your questions. Thank you.

Attachments A - I

Summary of Testimony of R Steve Creamer

- **Energy*Solutions*, headquartered in Salt Lake City, Utah is a nuclear services company that is committed to helping the United States achieve energy independence, reduce carbon emissions, and protect the environment.**
- **Energy*Solutions* is a world leader in the safe recycling, processing, transporting and disposal of nuclear material.**
- **Energy*Solutions* believes in "Safety First."**
- **Our state-of-the-art Bear Creek facility in Tennessee has one of two metal-melt facilities in the world. Bear Creek has recycled over 56,000 tons of metals including international metals.**
- **The recycled metals are formed into shield blocks which are used in nuclear and accelerator facilities throughout the world.**
- **Low-level radioactive material from nearly all 104 domestic nuclear plants is sent to Bear Creek for processing with the residual Class A waste disposed at our Clive, Utah facility.**
- **We also process material from the Departments of Energy and Defense, the Tennessee Valley Authority, hospitals and research facilities.**
- **The Clive facility, which has been in operation since 1988, has over 30 years of capacity. Clive has capacity to take all of the Class A waste from the 104 domestic nuclear plants and still have approximately 50 million cubic feet of capacity left.**
- **GAO stated before Congress in 2004 that "disposal availability of class A waste is not a problem in the short or longer term."**
- **Energy*Solutions* is cleaning up the legacy waste at many of the Department of Energy sites – Moab, Paducah, Oak Ridge, Hanford, Savannah River.**
- **Energy*Solutions* is a leading U.S. company with experience in recycling spent nuclear fuel.**
- **A variety of energy sources must be utilized to meet the growing energy demand in the U.S. and abroad including – solar, wind, biofuels and nuclear.**
- **Nuclear energy is a safe, clean, reliable and non-carbon emitting source of energy.**
- **Energy*Solutions* safely and responsibly manages the recycling, processing and disposal of nuclear material.**
- **Energy*Solutions* is committed to maintaining Clive's capacity principally for our domestic customers. This is why we offered to self-impose a limit on the disposal of international material to 5% of Clive's remaining capacity.**
- **Our pending application with the NRC to import low-level material from Italy is consistent with all applicable laws and regulations.**
- **The Italian material – metal, paper, clothing – is the same type of material that we handle every day from the domestic nuclear industry at our U.S. facilities.**
- **Approximately 1/3 of the material would be recycled. The remaining material would be incinerated or volume reduced. Around 8% of the material would be disposed at Clive. No material would be orphaned in the U.S. No material would be disposed in Tennessee.**

Attachment A

Proposed Italian Project

ENERGYSOLUTIONS

Proposed Italian Project Fact Sheet

Energy*Solutions*, a world leader in the recycling, processing and disposal of nuclear material, is committed to U.S. energy independence, reduced carbon emissions, environmental protection and safety. Energy*Solutions* provides services that are critical to support nuclear power generation that is key to addressing the threat of global warming.

Energy*Solutions* employs more than 5,000 dedicated professionals worldwide. Safety is Energy*Solutions* first priority - safety for our employees, safety for the environment, and safety for our communities. Energy*Solutions* has been recognized for safety excellence and transports nuclear material safely over 8 million miles per year.

Energy*Solutions* has a pending application with the Nuclear Regulatory Commission (NRC) to import low-level nuclear material from Italy and process it at the Bear Creek facility in Tennessee and dispose of a small amount of Class A material at the Clive facility in Utah. The NRC granted Energy*Solutions* a similar import license in 2006. Bear Creek has been processing foreign material for over 12 years.

The NRC issues an import license if it deems that the material would be handled in accordance with its regulations to protect public health, safety and the environment. The Utah Division of Radiation Control informed the NRC on March 26, 2008 that "Utah Radiation Control Rules do not prohibit the disposal of low-level radioactive waste from foreign generators." In a letter dated March 4, 2008, the Tennessee Division of Radiological Health, Department of Environment and Conservation, informed the NRC that the "Division finds no technical reason to prohibit processing of [the] described waste at the Duratek [Energy*Solutions*] facilities in Tennessee."

Energy*Solutions* recognizes that the Clive facility is a national asset and that our primary commitment is to maintain Clive's capacity principally for the domestic nuclear power industry and our other domestic customers. Clive has enough capacity to dispose of all of the low-level radioactive waste from the eventual decommissioning of the 104 U.S. nuclear reactors and still have abundant capacity, over 50 million cubic feet.

The material would be inspected in Italy by Energy*Solutions* highly trained personnel to ensure that it would meet the licenses at the Bear Creek and Clive facilities. It would be shipped from Italy to the United States in accordance with the International Atomic Energy Agency regulations and then transported by rail or truck to the Bear Creek processing facility in accordance with the requirements of the U.S. Department of Transportation. The material - metals, paper, paper, plastic, resins - is the same type of material that Energy*Solutions* processes and disposes each day from the domestic nuclear industry.

Over one-third of the material is metal that would be recycled at Bear Creek in a state-of-the-art facility. The recycled metals would be formed into shield blocks to be reused within the nuclear industry. The remaining material would be processed and volume reduced up to 200 to 1 so that the ultimate amount of material disposed at Clive would be just a small fraction of what is disposed at Clive on an annual basis. No material will be disposed in Tennessee.

Electricity has been produced in Italy by American and British designed nuclear reactors. The fuel for the reactors came mostly from U.S. uranium. Some of it was mined in Utah and enriched in Ohio and Kentucky. The spent nuclear fuel, which contains 99.998% of the radioactivity resulting from the nuclear generation of electricity, will be sent to France for recycling. The low-level material, containing just 0.002% of the radioactivity, would be processed and disposed in the United States.

Energy*Solutions* recognizes that energy security is essential to our nation's national security. Our nation must reduce its dependence on foreign oil, diversify its energy supply and increase conservation and energy efficiency. Nuclear power is a clean, safe, reliable source of energy that is vital in helping the United States achieve this important national objective.

As our nation and the world move to increase the use of nuclear power we must recognize that we are one world. The United States should stand ready to provide technical solutions to other countries. This does not mean that Energy*Solutions*, or any other U.S. company, will be responsible for disposing of the world's nuclear waste.

Energy*Solutions* is committed to protecting our environment, our employees and our local communities. We are committed to helping the United States achieve energy security. These are principles from which we will not waiver.

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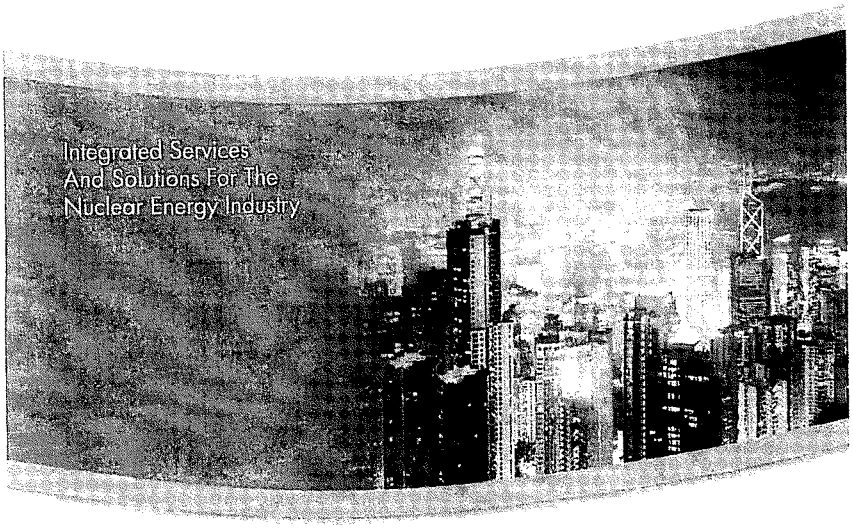
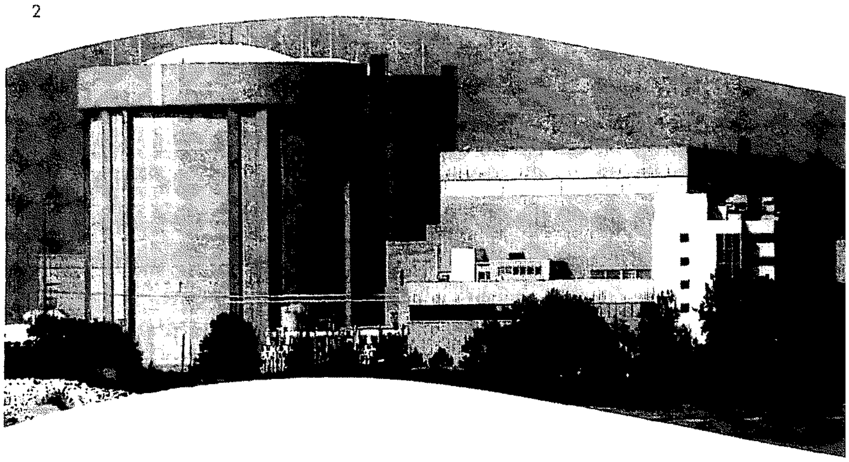
Attachment B

ENERGYSOLUTIONS



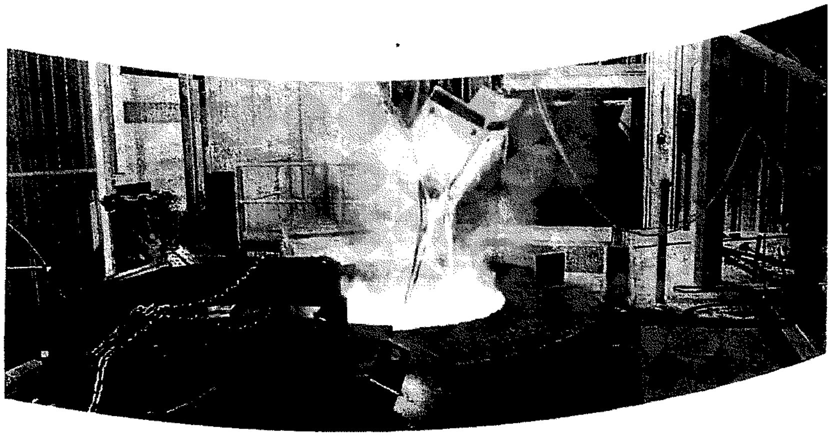
Committed to energy independence, reduced carbon emissions, environmental protection, and safety



The Energy Information Administration (EIA) is projecting the world energy consumption to grow by 57% over the next 20 years. Even with increased energy efficiency and conservation the world and the United States will see significant energy growth.

In order to meet the growing energy demand, and replace energy generation capacity that reaches the end of its useful life, the United States and the world must increase conservation and efficiency and utilize a variety of energy sources including solar, wind, biofuels and nuclear.

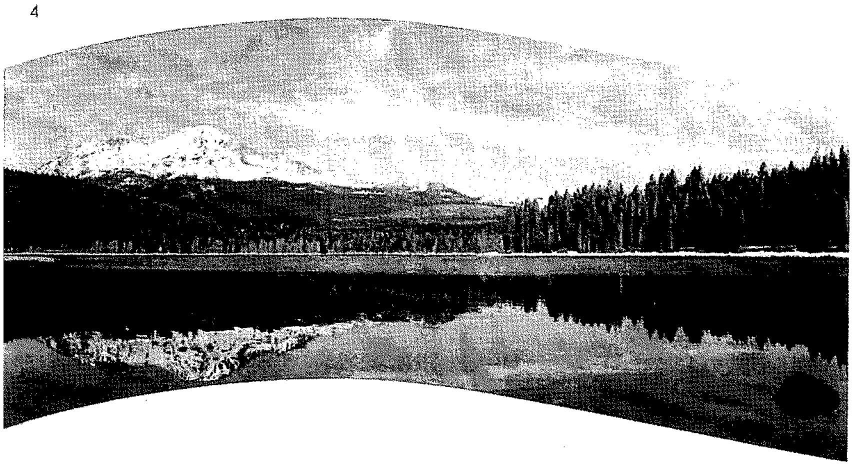
- Nuclear Energy is:
  - Clean
  - Safe
  - Reliable
- Currently nuclear power generates approximately 20% of the electricity in the United States.
- In 2007, the Nuclear Regulatory Commission (NRC) received seven applications for new nuclear plants.
- In order to make the nuclear renaissance a reality, the low-level radioactive waste generated by the nuclear plants must be safely processed and disposed.



In a global economy there are few barriers to trade in international markets.

- Oil, copper, gold, and many different chemicals are traded on the world market
- U.S. electronics/computers are recycled overseas
- U.S. plastic bottles are recycled overseas
- U.S. paper is recycled overseas
- Many medical isotopes are made overseas and are imported into the United States
- 85 percent of the U.S. nuclear fuel is imported

The integration of national economies into an international marketplace requires the United States to compete on the global stage. In order for nuclear power to grow as an alternative energy source, the United States needs global companies like Energy*Solutions* to safely and responsibly manage the recycling, processing and disposal of nuclear material.



Energy*Solutions*, a world leader in the recycling, processing and disposal of nuclear material, is committed to U.S. energy independence, reduced carbon emissions, environmental protection and safety.

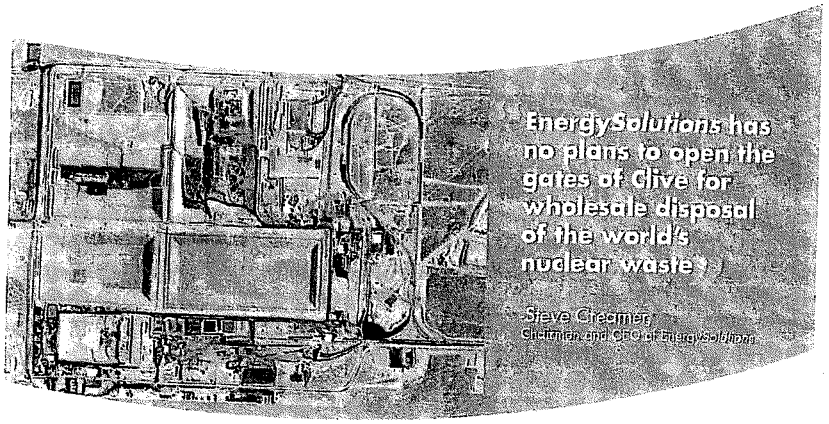
Energy*Solutions* provides integrated services and solutions to the nuclear energy industry, the federal government, doctors, hospitals and research facilities through:

- Recycling
- Processing
- Volume reduction
- Disposal
- Decommissioning
- Environmental restoration
- Transportation
- Quality assurance
- Fuel management
- Operating reactors

Energy*Solutions* – a leader in its field has:

- 20 years of experience in environmental restoration and waste disposal
- 12 years of experience in recycling nuclear materials
- Exceptional safety record – "Safety First"
- State-of-the-art technology
- 125 active Nuclear Regulatory Commission licenses
- Spent fuel management capabilities
- Involved in every reactor decommissioning in the U.S.
- Provides services to every U.S. commercial nuclear utility

Energy*Solutions* works closely with the United States government to assist in the cleanup of legacy Department of Energy sites that were contaminated principally during the weapons production program. Energy*Solutions* also works closely with the federal government on the global threat reduction program and other programs to keep our world safe and to enhance our environment.



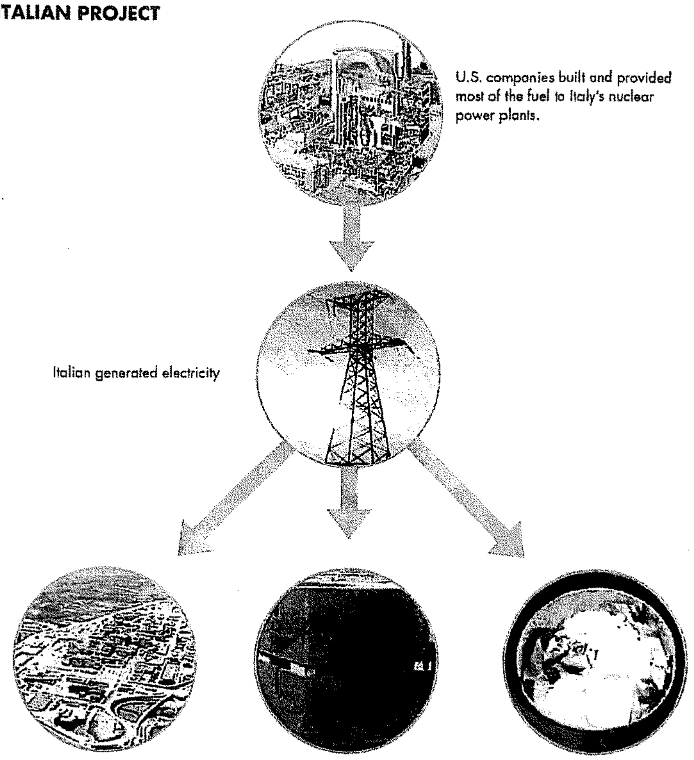
> EnergySolutions has no plans to open the gates of Clive for wholesale disposal of the world's nuclear waste”
>
> Steve Creamer,
> Chairman and CEO of Energy*Solutions*

Energy*Solutions* has committed that it will not import wholesale amounts of low-level nuclear materials into the United States.

"Energy*Solutions* has no plans to open the gates of Clive for wholesale disposal of the world's nuclear waste" said Steve Creamer, Chairman and CEO of Energy*Solutions*. "As we conduct business in other countries we need to be able to offer solutions that integrate our worldwide capabilities and from time to time that involves recycling or disposing some foreign material at our U.S. facilities. In these limited situations, we bring the use of world class facilities as a solution to complex challenges. This is the nature of global trade. We will not under any circumstance use the facilities in a manner that adversely affects the capacity needs to handle our United States customers now or in the future."

As the nation and the world move to increase the use of nuclear power we must recognize that we are one world. One that through trade and communications is becoming more connected. The United States government and U.S. companies should stand ready to provide technical solutions to those countries that are in need. This does not mean that Energy*Solutions*, or any other company in the United States, should be responsible for disposing of the world's nuclear waste. In fact, Energy*Solutions* anticipates that most waste can be processed and disposed in the countries of origin.

ITALIAN PROJECT



U.S. companies built and provided most of the fuel to Italy's nuclear power plants.

Italian generated electricity

Spent Fuel - 99.998% of radioactivity sent to France for reprocessing

Metal to be melted in Tennessee. Recycled for usage in Japan (0% radioactivity stays in TN)

Low-Level Waste - Some to be processed in Tennessee (<0.002% radioactivity). No disposal in TN. Small residual amount to be disposed of at Energy*Solutions* Clive facility in Utah.

FACTS ABOUT ENERGY*SOLUTIONS*

- Energy*Solutions* employs more than 5,000 dedicated professionals worldwide.

- Energy*Solutions* has conducted approximately 51,000 shipments of nuclear material without incident – 300 radioactive shipments per month - averaging nearly 8 million miles per year.

- Energy*Solutions* processing and disposal capabilities are critical to the nuclear power industry, helping to maintain the U.S. as a leader in the nuclear industry;

  - Processing at the Bear Creek facility in Tennessee can reduce volumes 200 to 1.
  - Bear Creek has 1 of 2 melting facilities in the world.
  - Recycled over 120 million pounds of radiologically contaminated metals for beneficial reuse in the nuclear industry since 1993.
  - The Clive facility in Utah has sufficient capacity for all low-level radioactive waste from the eventual decommissioning of all 104 U.S. reactors. Clive would still have over 50 million cubic feet of capacity.
  - Low-level waste is less radioactive than the material in common smoke detectors.

- Energy*Solutions* operates in a highly regulated industry. Dozens of audits are conducted by federal and state regulatory agencies and commercial audit entities each year.

- Energy*Solutions* has imported nuclear material for over 12 years in compliance with all regulatory requirements.

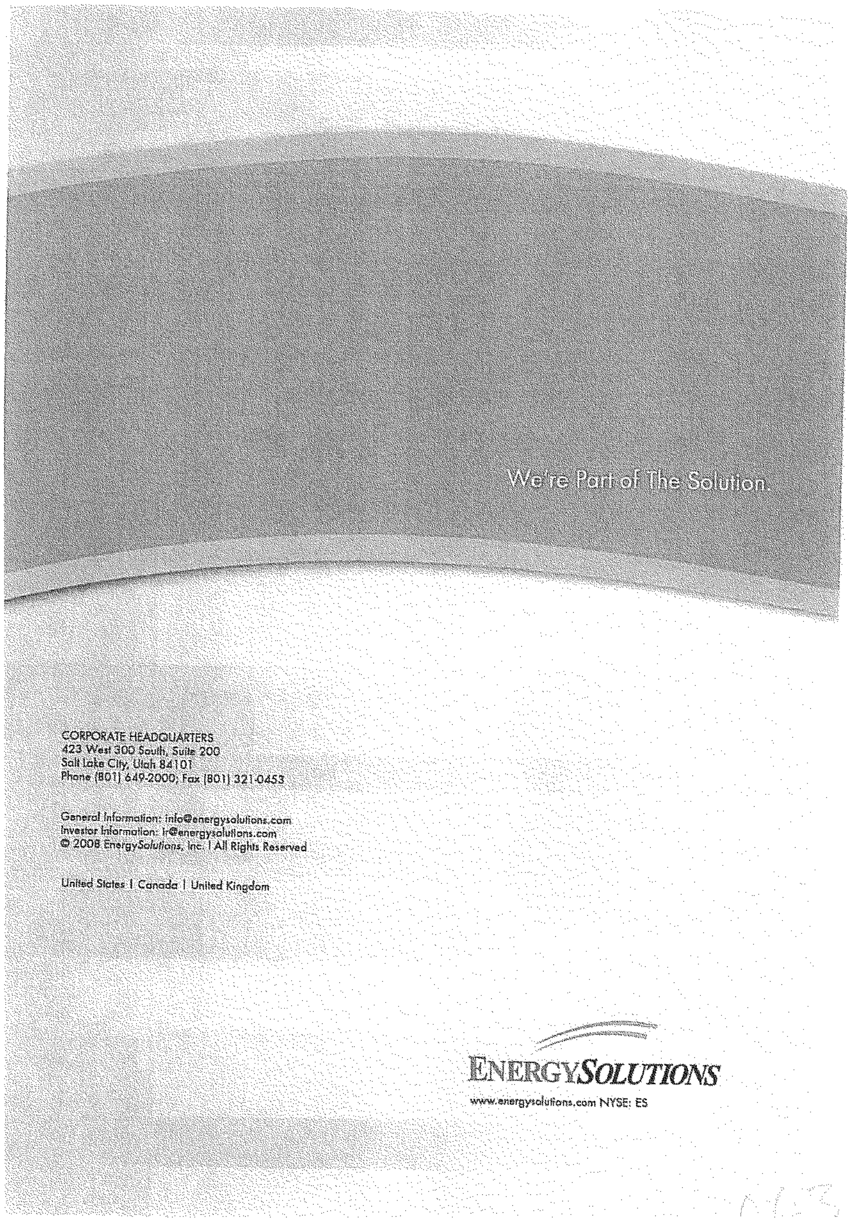
- The Italian import license application is for up to 20,000 tons of low-level nuclear material.

  - Same types of material as from U.S. utilities: metals, resins, papers, etc.
  - Most of the material originates from U.S. technology and fuel.

- The Italian material would only be imported after extensive characterization by Energy*Solutions* in Italy.

  - Would meet waste acceptance criteria for Bear Creek and Clive facilities.

- The Utah Division of Radiation Control informed the NRC on March 26, 2008 that "Utah Radiation Control Rules do not prohibit the disposal of low-level radioactive waste from foreign generators." In a letter dated March 4, 2008, the Tennessee Division of Radiological Health, Department of Environment and Conservation, informed the NRC that the "Division finds no technical reason to prohibit procession of [the] described waste at the Duratek [Energy*Solutions*] facilities in Tennessee."



We're Part of The Solution.

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United States | Canada | United Kingdom

ENERGY*SOLUTIONS*
www.energysolutions.com NYSE: ES

N23

Attachment C

Eduardo Sastre

From: Brooke Smith
Sent: Wednesday, March 26, 2008 3:47 PM
To: Eduardo Sastre
Subject: FW: License Application IW023

From: Dane Finerfrock [mailto:DFINERFROCK@utah.gov]
Sent: Wednesday, March 26, 2008 3:29 PM
To: Stephen Dembek
Cc: Brooke Smith
Subject: License Application IW023

Dear Mr. Dembek:

This refers to your letter dated February 19, 2008. I appreciate the opportunity to comment on the EnergySolutions license application to import radioactive materials , some of which is expected to be disposed of at the EnergySolutions disposal site in Utah as low-level radioactive waste(LLRW).

We are providing the following comments:

* The Utah Radiation Control Rules do not prohibit the disposal of low-level radioactive waste from foreign generators.

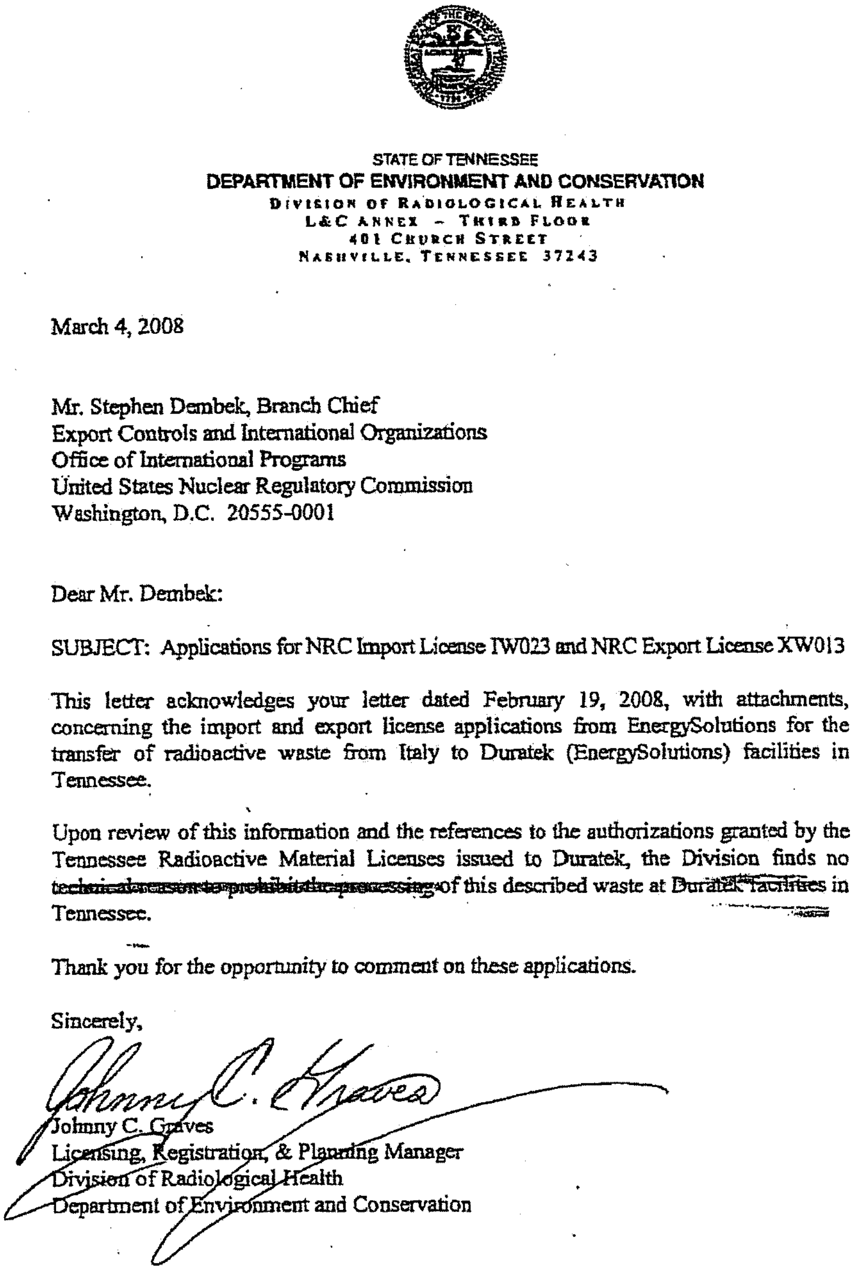
* All LLRW sent to EnergySolutions for disposal must meet the license conditions of the current Radioactive Materials License, #UT2300249, issued by the Utah Division of Radiation Control.

* Please be aware that the Utah Radiation Control Board and Utah Governor Jon Huntsman wrote to Commissioner Klein requesting the NRC license deliberations take into account several national policy issues relating to the application.

Please contact me at 801-536-4250 if you have any questions.

Sincerely,

Dane Finerfrock, Director
Utah Division of Radiation Control



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
L&C ANNEX – THIRD FLOOR
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243

March 4, 2008

Mr. Stephen Dembek, Branch Chief
Export Controls and International Organizations
Office of International Programs
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Dembek:

SUBJECT: Applications for NRC Import License IW023 and NRC Export License XW013

This letter acknowledges your letter dated February 19, 2008, with attachments, concerning the import and export license applications from EnergySolutions for the transfer of radioactive waste from Italy to Duratek (EnergySolutions) facilities in Tennessee.

Upon review of this information and the references to the authorizations granted by the Tennessee Radioactive Material Licenses issued to Duratek, the Division finds no ~~technical reason to prohibit the processing~~ of this described waste at ~~Duratek facilities~~ in Tennessee.

Thank you for the opportunity to comment on these applications.

Sincerely,

Johnny C. Graves

Johnny C. Graves
Licensing, Registration, & Planning Manager
Division of Radiological Health
Department of Environment and Conservation

1100571

Attachment D

ENERGY*SOLUTIONS*

and

1100570 - XW013

CD07-0304

September 14, 2007

Mr. Scott Moore, Deputy Director
Office of International Programs
U.S. Nuclear Regulatory Commission
Mail Stop O4E21
11555 Rockville Pike
Rockville, MD 20852

Subject: Applications for 1) Specific License to Import Radioactive Material (from Italy)
2) Specific License to Export Radioactive Material (to Italy)

Dear Mr. Moore:

Energy*Solutions* requests a specific license to import potentially radioactively contaminated material from Italy to our licensed disposal facility in Clive, Utah. In conjunction with the request for import authorization, we are also requesting a specific license for return shipment, to the extent necessary, back to Italy.

This license is a generic license to allow the importation of up to 20,000 tons of radioactively contaminated material including metals, graphite, dry activity material such as wood, paper, and plastic, ion exchange resins, and liquids such as aqueous and organic based fluids. The sources of this material are not fully known as of the date of this application but will be limited to Italian facilities authorized to use and possess radioactive material such as reactors, fuel cycle facilities, research facilities, and material licensees or facilities equivalent to US Superfund sites. It is expected that the material to be imported would be generated during various activities such as remediation, decontamination, decommissioning, maintenance, equipment upgrades, and routine operational activities. Some of the material to be imported may be free from contamination, some may only be surficially contaminated, and some may be volumetrically contaminated.

The purpose of the import license is to import contaminated material for disposal at our Utah facility. Intermediate uses include inspections, surveys, sorting, and stabilization (as required) at our licensed Tennessee facilities. The purpose of the export license is to allow Italian waste that cannot be disposed in Utah to be exported back to Italy.

The Form 7 applications, including our referenced facility licenses, are attached. We assume NRC will appropriately delete possession limit information in the interest of materials security prior to making these documents publicly available. In addition, we request that specific facility addresses and personal contact information (Form 7 continuation pages) be deleted prior to releasing these pages for review by the public. We have enclosed a check in the amount of $19,600 to address the fees for two applications specified in 10 CFR 170.31, Category 15 B., assuming Executive Branch, but not Commission review, is required for each application.

Rec'd 9-17-07
PD

423 West 300 South, Suite 200 • Salt Lake City, Utah 84101
801.649.2000 • Fax: 801.321.0453 • www.energysolutions.com

If you have any questions or need additional information, please do not hesitate to call me at 801-649-2000.

Sincerely,

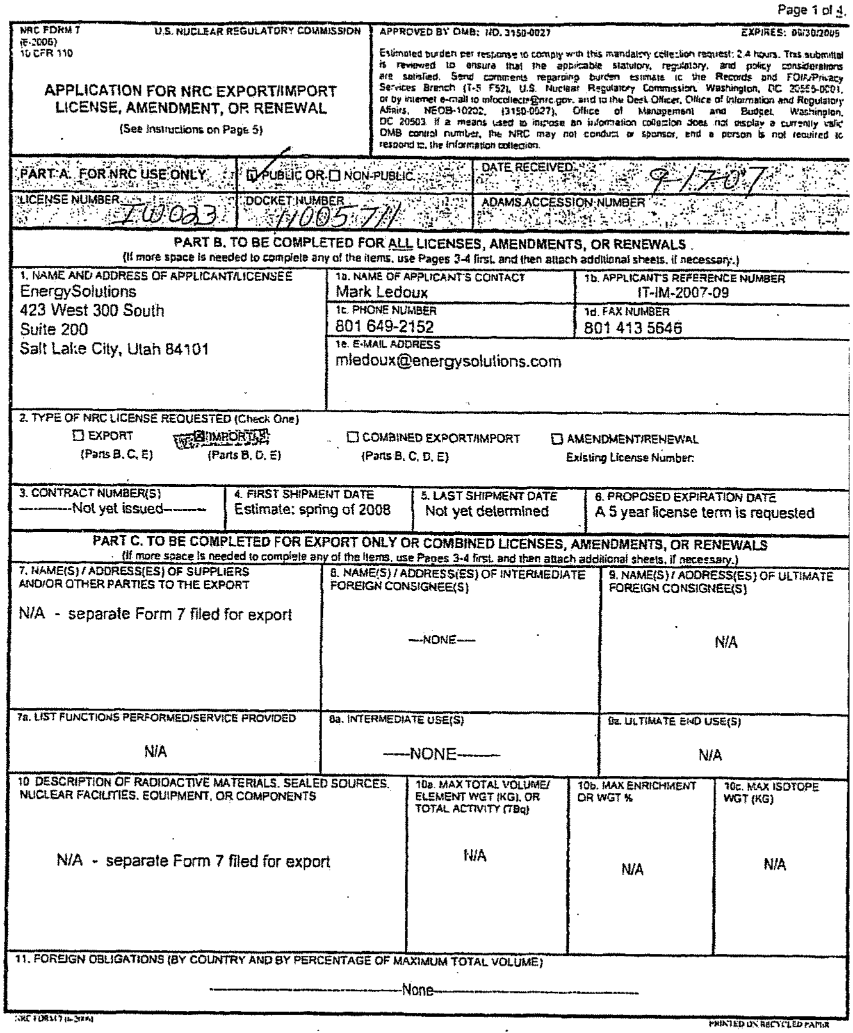
Tye Rogers

Tye Rogers
Senior Vice President, Regulatory Affairs
Energy*Solutions*

Attachments:
(2) Copies Mr. Moore
- 1) Import Application (Form 7)
- 2) Export Application (Form 7)
- 3) Letter from Utah Division of Radiation Control (CD)
- 4) Licenses (CD)
- 5) Application fee check

cc: Mr. Paul MacMurdy, USNRC OIP (1) copy

Rec'd 9-17-07
PB



Page 1 of 4.

NRC FORM 7
(E-2006)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL

(See Instructions on Page 5)

APPROVED BY OMB: NO. 3150-0027 EXPIRES: 06/30/2009

Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

PART A. FOR NRC USE ONLY	☑ PUBLIC OR ☐ NON-PUBLIC	DATE RECEIVED 9-17-07
LICENSE NUMBER IW023	DOCKET NUMBER 11005711	ADAMS ACCESSION NUMBER

PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, OR RENEWALS
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

1. NAME AND ADDRESS OF APPLICANT/LICENSEE
EnergySolutions
423 West 300 South
Suite 200
Salt Lake City, Utah 84101

1a. NAME OF APPLICANT'S CONTACT
Mark Ledoux

1b. APPLICANT'S REFERENCE NUMBER
IT-IM-2007-09

1c. PHONE NUMBER
801 649-2152

1d. FAX NUMBER
801 413 5646

1e. E-MAIL ADDRESS
mledoux@energysolutions.com

2. TYPE OF NRC LICENSE REQUESTED (Check One)

☐ EXPORT (Parts B, C, E)	☒ IMPORT (Parts B, D, E)	☐ COMBINED EXPORT/IMPORT (Parts B, C, D, E)	☐ AMENDMENT/RENEWAL Existing License Number:

3. CONTRACT NUMBER(S)	4. FIRST SHIPMENT DATE	5. LAST SHIPMENT DATE	6. PROPOSED EXPIRATION DATE
---------Not yet issued--------	Estimate: spring of 2008	Not yet determined	A 5 year license term is requested

PART C. TO BE COMPLETED FOR EXPORT ONLY OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

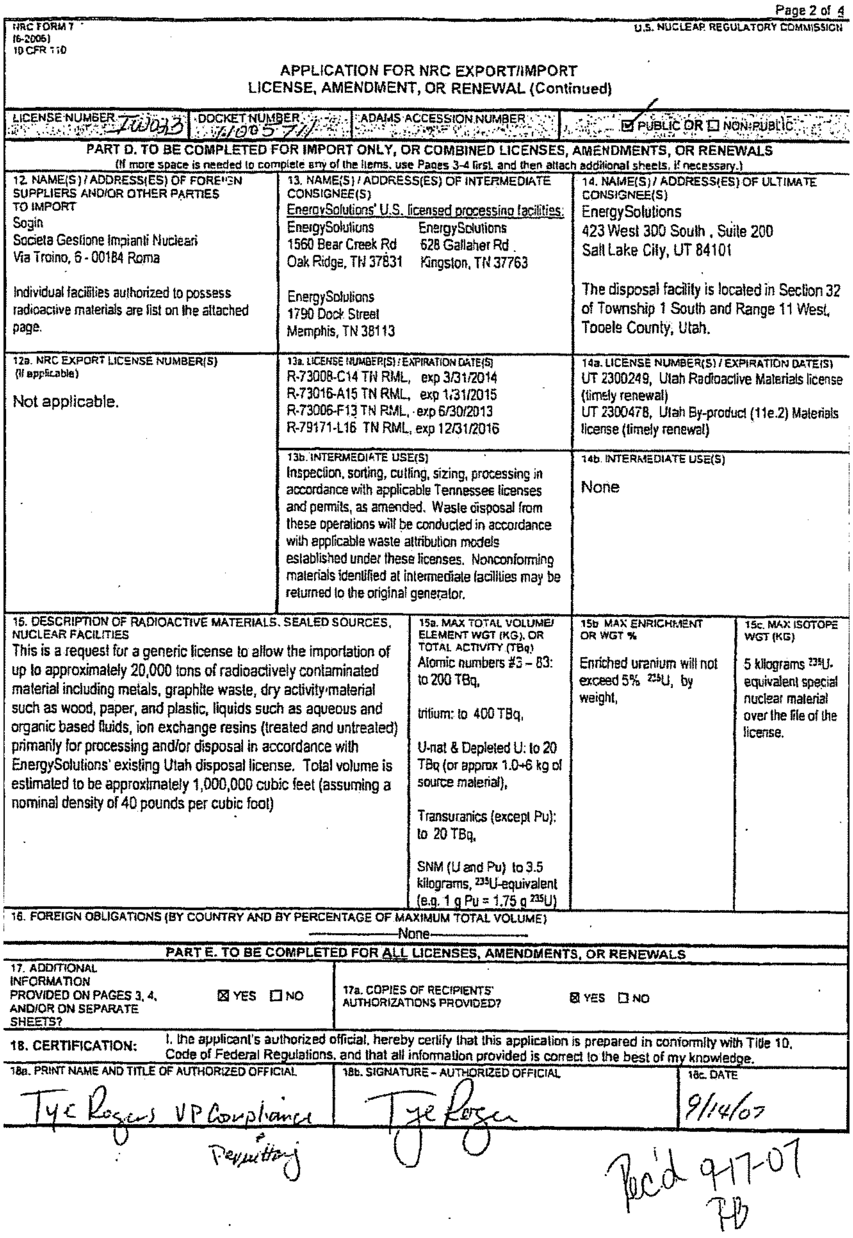
7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT	8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)	9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S)
N/A - separate Form 7 filed for export	---NONE---	N/A
7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED	8a. INTERMEDIATE USE(S)	9a. ULTIMATE END USE(S)
N/A	----NONE----	N/A

10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS	10a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	10b. MAX ENRICHMENT OR WGT %	10c. MAX ISOTOPE WGT (KG)
N/A - separate Form 7 filed for export	N/A	N/A	N/A

11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)
---------------------------None---------------------------

NRC FORM 7 (6-2006) PRINTED ON RECYCLED PAPER

Rec'd 9-17-07
RB



Page 2 of 4

NRC FORM 7
(6-2006)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued)

LICENSE NUMBER IW023	DOCKET NUMBER 11005711	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC

PART D. TO BE COMPLETED FOR IMPORT ONLY, OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. NAME(S) / ADDRESS(ES) OF FOREIGN SUPPLIERS AND/OR OTHER PARTIES TO IMPORT Sogin Societa Gestione Impianti Nucleari Via Troino, 6 - 00184 Roma Individual facilities authorized to possess radioactive materials are list on the attached page.	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S) EnergySolutions' U.S. licensed processing facilities: EnergySolutions, 1560 Bear Creek Rd, Oak Ridge, TN 37831 EnergySolutions, 628 Gallaher Rd, Kingston, TN 37763 EnergySolutions, 1790 Dock Street, Memphis, TN 38113	14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S) EnergySolutions 423 West 300 South, Suite 200 Salt Lake City, UT 84101 The disposal facility is located in Section 32 of Township 1 South and Range 11 West, Tooele County, Utah.
12a. NRC EXPORT LICENSE NUMBER(S) (If applicable) Not applicable.	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S) R-73008-C14 TN RML, exp 3/31/2014 R-73016-A15 TN RML, exp 1/31/2015 R-73006-F13 TN RML, exp 6/30/2013 R-79171-L16 TN RML, exp 12/31/2016	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S) UT 2300249, Utah Radioactive Materials license (timely renewal) UT 2300478, Utah By-product (11e.2) Materials license (timely renewal)
	13b. INTERMEDIATE USE(S) Inspection, sorting, cutting, sizing, processing in accordance with applicable Tennessee licenses and permits, as amended. Waste disposal from these operations will be conducted in accordance with applicable waste attribution models established under these licenses. Nonconforming materials identified at intermediate facilities may be returned to the original generator.	14b. INTERMEDIATE USE(S) None

15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES	15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	15b MAX ENRICHMENT OR WGT %	15c. MAX ISOTOPE WGT (KG)
This is a request for a generic license to allow the importation of up to approximately 20,000 tons of radioactively contaminated material including metals, graphite waste, dry activity material such as wood, paper, and plastic, liquids such as aqueous and organic based fluids, ion exchange resins (treated and untreated) primarily for processing and/or disposal in accordance with EnergySolutions' existing Utah disposal license. Total volume is estimated to be approximately 1,000,000 cubic feet (assuming a nominal density of 40 pounds per cubic foot)	Atomic numbers #3 – 83: to 200 TBq, tritium: to 400 TBq, U-nat & Depleted U: to 20 TBq (or approx 1.0+6 kg of source material), Transuranics (except Pu): to 20 TBq, SNM (U and Pu) to 3.5 kilograms, ^{235}U-equivalent (e.g. 1 g Pu = 1.75 g ^{235}U)	Enriched uranium will not exceed 5% ^{235}U, by weight,	5 kilograms ^{235}U-equivalent special nuclear material over the life of the license.

16. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)

——————None——————

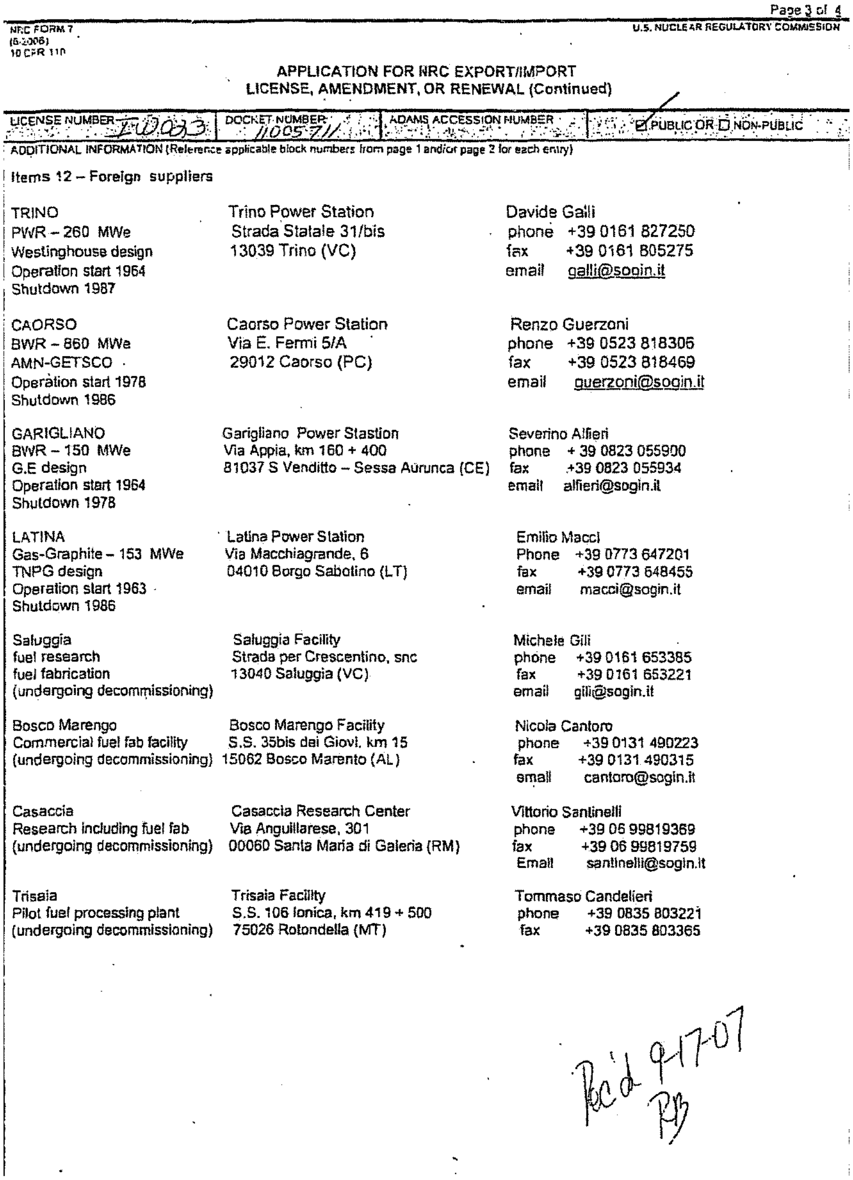
PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, OR RENEWALS

17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS? ☒ YES ☐ NO	17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED? ☒ YES ☐ NO

18. CERTIFICATION: I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.

18a. PRINT NAME AND TITLE OF AUTHORIZED OFFICIAL Tye Rogers VP Compliance Permitting	18b. SIGNATURE - AUTHORIZED OFFICIAL Tye Rogers	18c. DATE 9/14/07

Rec'd 9-17-07
PB



Page 3 of 4

NRC FORM 7
(6-2006)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued)

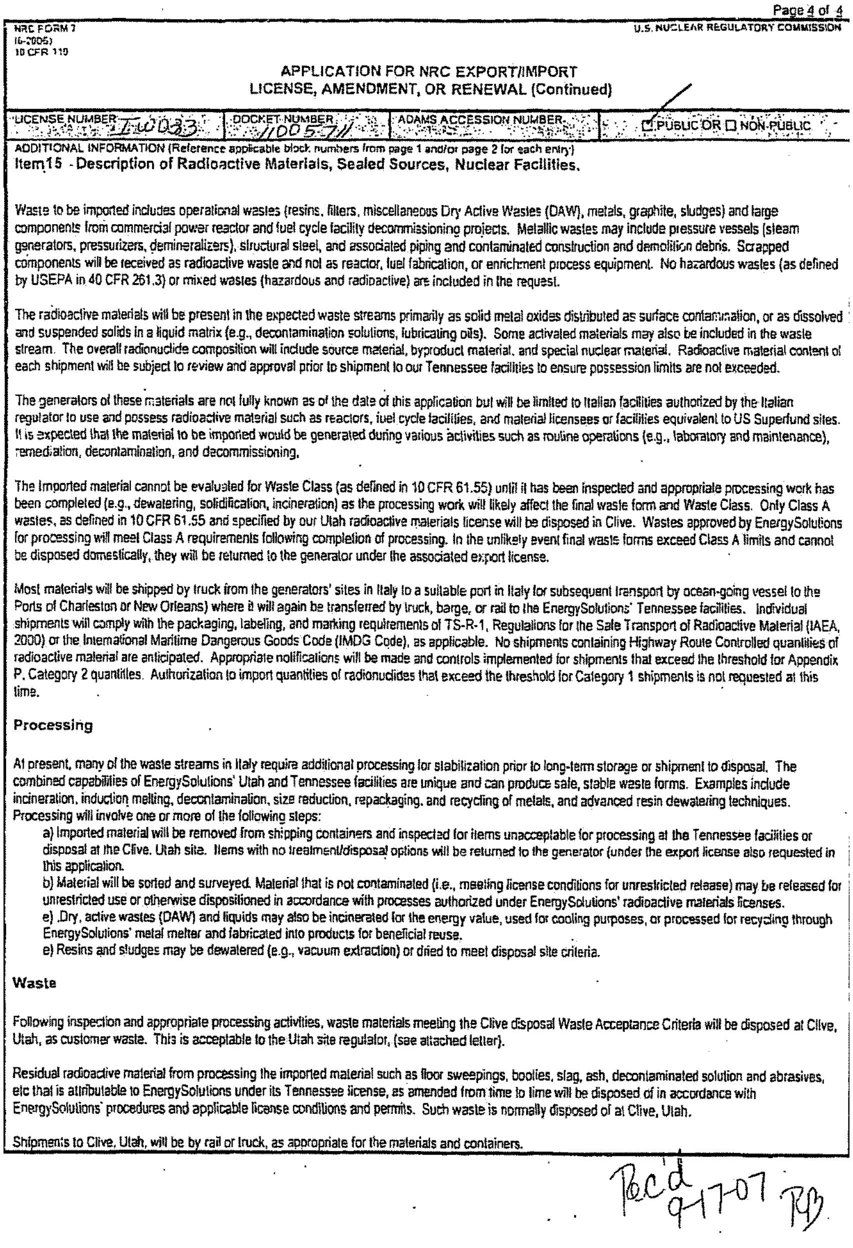
LICENSE NUMBER IW033 | DOCKET NUMBER 11005711 | ADAMS ACCESSION NUMBER | ☑ PUBLIC OR ☐ NON-PUBLIC

ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Items 12 – Foreign suppliers

TRINO PWR – 260 MWe Westinghouse design Operation start 1964 Shutdown 1987	Trino Power Station Strada Statale 31/bis 13039 Trino (VC)	Davide Galli phone +39 0161 827250 fax +39 0161 805275 email galli@sogin.it
CAORSO BWR – 860 MWe AMN-GETSCO Operation start 1978 Shutdown 1986	Caorso Power Station Via E. Fermi 5/A 29012 Caorso (PC)	Renzo Guerzoni phone +39 0523 818306 fax +39 0523 818469 email guerzoni@sogin.it
GARIGLIANO BWR – 150 MWe G.E design Operation start 1964 Shutdown 1978	Garigliano Power Stastion Via Appia, km 160 + 400 81037 S Venditto – Sessa Aurunca (CE)	Severino Alfieri phone + 39 0823 055900 fax +39 0823 055934 email alfieri@sogin.it
LATINA Gas-Graphite – 153 MWe TNPG design Operation start 1963 Shutdown 1986	Latina Power Station Via Macchiagrande, 6 04010 Borgo Sabotino (LT)	Emilio Macci Phone +39 0773 647201 fax +39 0773 648455 email macci@sogin.it
Saluggia fuel research fuel fabrication (undergoing decommissioning)	Saluggia Facility Strada per Crescentino, snc 13040 Saluggia (VC)	Michele Gili phone +39 0161 653385 fax +39 0161 653221 email gili@sogin.it
Bosco Marengo Commercial fuel fab facility (undergoing decommissioning)	Bosco Marengo Facility S.S. 35bis dei Giovi. km 15 15062 Bosco Marento (AL)	Nicola Cantoro phone +39 0131 490223 fax +39 0131 490315 email cantoro@sogin.it
Casaccia Research including fuel fab (undergoing decommissioning)	Casaccia Research Center Via Anguillarese, 301 00060 Santa Maria di Galeria (RM)	Vittorio Santinelli phone +39 06 99819369 fax +39 06 99819759 Email santinelli@sogin.it
Trisaia Pilot fuel processing plant (undergoing decommissioning)	Trisaia Facility S.S. 106 Ionica, km 419 + 500 75026 Rotondella (MT)	Tommaso Candelieri phone +39 0835 803221 fax +39 0835 803365

Rec'd 9-17-07
RB



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NRC FORM 7
(6-2005)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued)

LICENSE NUMBER IW033	DOCKET NUMBER 11005711	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC

ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Item 15 - Description of Radioactive Materials, Sealed Sources, Nuclear Facilities.

Waste to be imported includes operational wastes (resins, filters, miscellaneous Dry Active Wastes (DAW), metals, graphite, sludges) and large components from commercial power reactor and fuel cycle facility decommissioning projects. Metallic wastes may include pressure vessels (steam generators, pressurizers, demineralizers), structural steel, and associated piping and contaminated construction and demolition debris. Scrapped components will be received as radioactive waste and not as reactor, fuel fabrication, or enrichment process equipment. No hazardous wastes (as defined by USEPA in 40 CFR 261.3) or mixed wastes (hazardous and radioactive) are included in the request.

The radioactive materials will be present in the expected waste streams primarily as solid metal oxides distributed as surface contamination, or as dissolved and suspended solids in a liquid matrix (e.g., decontamination solutions, lubricating oils). Some activated materials may also be included in the waste stream. The overall radionuclide composition will include source material, byproduct material, and special nuclear material. Radioactive material content of each shipment will be subject to review and approval prior to shipment to our Tennessee facilities to ensure possession limits are not exceeded.

The generators of these materials are not fully known as of the date of this application but will be limited to Italian facilities authorized by the Italian regulator to use and possess radioactive material such as reactors, fuel cycle facilities, and material licensees or facilities equivalent to US Superfund sites. It is expected that the material to be imported would be generated during various activities such as routine operations (e.g., laboratory and maintenance), remediation, decontamination, and decommissioning.

The Imported material cannot be evaluated for Waste Class (as defined in 10 CFR 61.55) until it has been inspected and appropriate processing work has been completed (e.g., dewatering, solidification, incineration) as the processing work will likely affect the final waste form and Waste Class. Only Class A wastes, as defined in 10 CFR 61.55 and specified by our Utah radioactive materials license will be disposed in Clive. Wastes approved by EnergySolutions for processing will meet Class A requirements following completion of processing. In the unlikely event final waste forms exceed Class A limits and cannot be disposed domestically, they will be returned to the generator under the associated export license.

Most materials will be shipped by truck from the generators' sites in Italy to a suitable port in Italy for subsequent transport by ocean-going vessel to the Ports of Charleston or New Orleans) where it will again be transferred by truck, barge, or rail to the EnergySolutions' Tennessee facilities. Individual shipments will comply with the packaging, labeling, and marking requirements of TS-R-1, Regulations for the Safe Transport of Radioactive Material (IAEA, 2000) or the International Maritime Dangerous Goods Code (IMDG Code), as applicable. No shipments containing Highway Route Controlled quantities of radioactive material are anticipated. Appropriate notifications will be made and controls implemented for shipments that exceed the threshold for Appendix P, Category 2 quantities. Authorization to import quantities of radionuclides that exceed the threshold for Category 1 shipments is not requested at this time.

Processing

At present, many of the waste streams in Italy require additional processing for stabilization prior to long-term storage or shipment to disposal. The combined capabilities of EnergySolutions' Utah and Tennessee facilities are unique and can produce safe, stable waste forms. Examples include incineration, induction melting, decontamination, size reduction, repackaging, and recycling of metals, and advanced resin dewatering techniques. Processing will involve one or more of the following steps:

a) Imported material will be removed from shipping containers and inspected for items unacceptable for processing at the Tennessee facilities or disposal at the Clive, Utah site. Items with no treatment/disposal options will be returned to the generator (under the export license also requested in this application.

b) Material will be sorted and surveyed. Material that is not contaminated (i.e., meeting license conditions for unrestricted release) may be released for unrestricted use or otherwise dispositioned in accordance with processes authorized under EnergySolutions' radioactive materials licenses.

e) Dry, active wastes (DAW) and liquids may also be incinerated for the energy value, used for cooling purposes, or processed for recycling through EnergySolutions' metal melter and fabricated into products for beneficial reuse.

e) Resins and sludges may be dewatered (e.g., vacuum extraction) or dried to meet disposal site criteria.

Waste

Following inspection and appropriate processing activities, waste materials meeting the Clive disposal Waste Acceptance Criteria will be disposed at Clive, Utah, as customer waste. This is acceptable to the Utah site regulator, (see attached letter).

Residual radioactive material from processing the imported material such as floor sweepings, booties, slag, ash, decontaminated solution and abrasives, etc that is attributable to EnergySolutions under its Tennessee license, as amended from time to time will be disposed of in accordance with EnergySolutions' procedures and applicable license conditions and permits. Such waste is normally disposed of at Clive, Utah.

Shipments to Clive, Utah, will be by rail or truck, as appropriate for the materials and containers.

Rec'd 9-17-07 RB

Page 1 of 4

NRC FORM 7 U.S. NUCLEAR REGULATORY COMMISSION (6-2006) 10 CFR 110 **APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL** (See Instructions on Page 5)	APPROVED BY OMB: NO. 3150-0027 EXPIRES: 06/30/2009 Estimated burden per response to comply with this mandatory collection request: 2 4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

PART A. FOR NRC USE ONLY	☑ PUBLIC OR ☐ NON-PUBLIC	DATE RECEIVED 9-17-07
LICENSE NUMBER XW013	DOCKET NUMBER 11005710	ADAMS ACCESSION NUMBER

PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, OR RENEWALS
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

1. NAME AND ADDRESS OF APPLICANT/LICENSEE EnergySolutions 423 West 300 South Suite 200 Salt Lake City, Utah 84101	1a. NAME OF APPLICANT'S CONTACT Mark Ledoux	1b. APPLICANT'S REFERENCE NUMBER IT-X-2007-09
	1c. PHONE NUMBER 801 649-2152	1d. FAX NUMBER 801 413 5646
	1e. E-MAIL ADDRESS mledoux@energysolutions.com	

2. TYPE OF NRC LICENSE REQUESTED (Check One)

☒ EXPORT (Parts B, C, E) ☐ IMPORT (Parts B, D, E) ☐ COMBINED EXPORT/IMPORT (Parts B, C, D, E) ☐ AMENDMENT/RENEWAL Existing License Number:

3. CONTRACT NUMBER(S) ---------Not yet issued---------	4. FIRST SHIPMENT DATE Estimate: mid 2008	5. LAST SHIPMENT DATE Up to 1 yr following termination of the associated import license requested	6. PROPOSED EXPIRATION DATE 1 yr following expiration of the requested import license, application reference # IT-IM-2007-09

PART C. TO BE COMPLETED FOR EXPORT ONLY OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

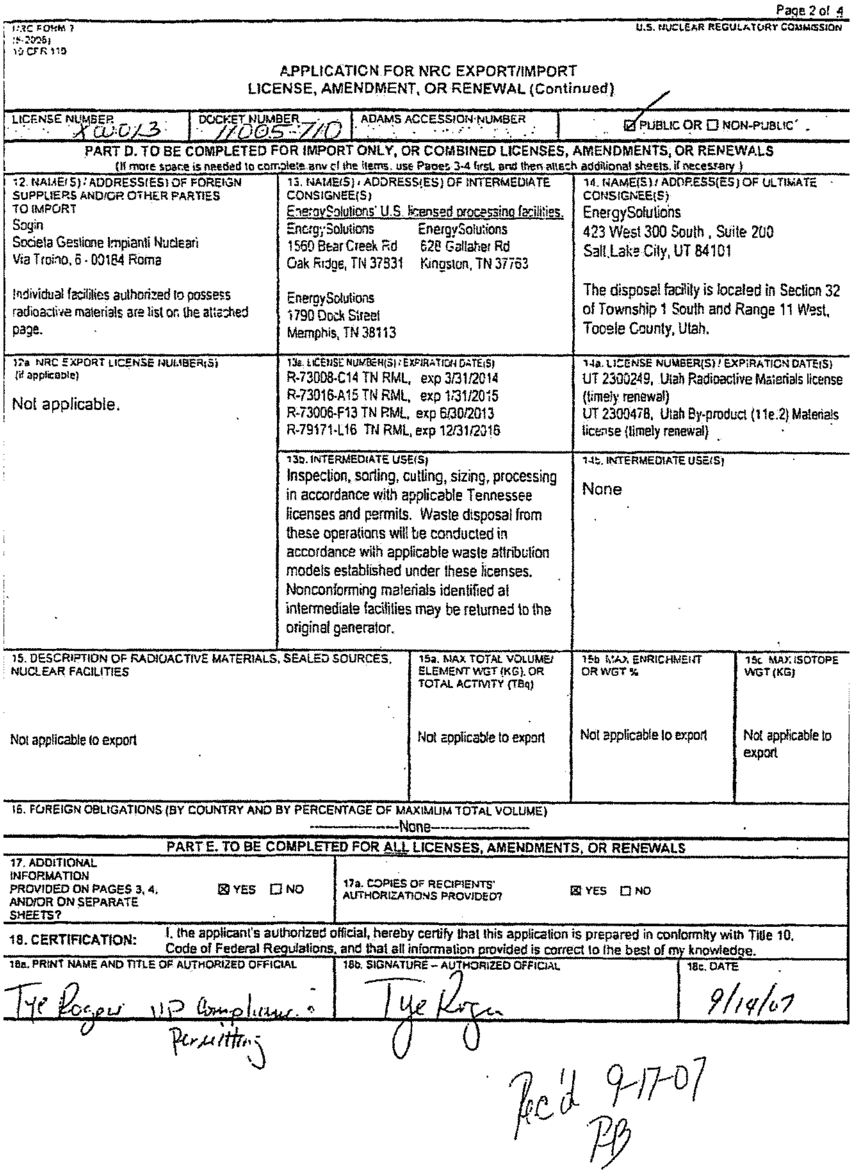
7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT EnergySolutions 423 West 300 South Suite 200 Salt Lake City, Utah 84101 EnergySolutions' U.S. licensed processing facilities: EnergySolutions 1560 Bear Creek Rd Oak Ridge, TN 37831 EnergySolutions 628 Gallaher Rd Kingston, TN 37763 EnergySolutions 1790 Dock Street Memphis, TN 38113	8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S) —NONE—	9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S) Sogin Societa Gestione Impianti Nucleari Via Troino, 6 - 00184 Roma Individual facilities authorized to possess radioactive materials are listed on the attached page.
7a. LIST FUNCTIONS PERFORMED/SERVICE PROVIDED Packaging for transport in accordance with applicable requirements	8a. INTERMEDIATE USE(S) ——NONE——	9a. ULTIMATE END USE(S) Export authorization is requested as a contingency for return of non-conforming waste.

10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS	10a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	10b. MAX ENRICHMENT OR WGT %	10c. MAX ISOTOPE WGT (KG)
The requested export license is being sought to provide a contingency for the return of material imported under the associated import license in the unlikely event that it cannot be dispositioned under the EnergySolutions' Utah and Tennessee radioactive materials licenses (as amended). At this time it is not possible to estimate the quantities, volume, and activity of the materials that will need to be exported. It will be a very small fraction of the quantities which are specified in the associated import application. See continuation page.	The physical mass, volume, and activity values are approximately 10% of the values used in the corresponding import application.	Enriched Uranium is not expected to exceed 5% ^{235}U by weight.	Exports will be less than 5 kg ^{235}U over the proposed life of the license.

11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)
————————————None————————————

NRC FORM 7 (6-2006)

Rec'd 9-17-07
PB



Page 2 of 4

NRC FORM 7
(5-2006)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued)

LICENSE NUMBER XW013	DOCKET NUMBER 11005-710	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC

PART D. TO BE COMPLETED FOR IMPORT ONLY, OR COMBINED LICENSES, AMENDMENTS, OR RENEWALS

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. NAME(S) / ADDRESS(ES) OF FOREIGN SUPPLIERS AND/OR OTHER PARTIES TO IMPORT Sogin Societa Gestione Impianti Nucleari Via Troino, 6 - 00184 Roma Individual facilities authorized to possess radioactive materials are list on the attached page.	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S) EnergySolutions' U.S. licensed processing facilities. EnergySolutions 1560 Bear Creek Rd Oak Ridge, TN 37831 EnergySolutions 628 Gallaher Rd Kingston, TN 37763 EnergySolutions 1790 Dock Street Memphis, TN 38113	14. NAME(S) / ADDRESS(ES) OF ULTIMATE CONSIGNEE(S) EnergySolutions 423 West 300 South , Suite 200 Salt Lake City, UT 84101 The disposal facility is located in Section 32 of Township 1 South and Range 11 West, Tooele County, Utah.
12a. NRC EXPORT LICENSE NUMBER(S) (if applicable) Not applicable.	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S) R-73008-C14 TN RML, exp 3/31/2014 R-73016-A15 TN RML, exp 1/31/2015 R-73006-F13 TN RML, exp 6/30/2013 R-79171-L16 TN RML, exp 12/31/2016	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S) UT 2300249, Utah Radioactive Materials license (timely renewal) UT 2300478, Utah By-product (11e.2) Materials license (timely renewal)
	13b. INTERMEDIATE USE(S) Inspection, sorting, cutting, sizing, processing in accordance with applicable Tennessee licenses and permits. Waste disposal from these operations will be conducted in accordance with applicable waste attribution models established under these licenses. Nonconforming materials identified at intermediate facilities may be returned to the original generator.	14b. INTERMEDIATE USE(S) None

15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES	15a. MAX TOTAL VOLUME/ ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	15b. MAX ENRICHMENT OR WGT %	15c. MAX ISOTOPE WGT (KG)
Not applicable to export	Not applicable to export	Not applicable to export	Not applicable to export

16. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)
------------------None------------------

PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, OR RENEWALS

17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS? ☒ YES ☐ NO	17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED? ☒ YES ☐ NO

18. CERTIFICATION: I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.

18a. PRINT NAME AND TITLE OF AUTHORIZED OFFICIAL Tye Rogers VP Compliance & Permitting	18b. SIGNATURE – AUTHORIZED OFFICIAL Tye Rogers	18c. DATE 9/14/07

Rec'd 9-17-07
PB

NRC FORM 7
(6-2003)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT LICENSE, AMENDMENT, OR RENEWAL (Continued)

LICENSE NUMBER XW013	DOCKET NUMBER 11005710	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC

ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Items 9 – Foreign Consignees

TRINO PWR – 260 MWe Westinghouse design Operation start 1964 Shutdown 1987	Trino Power Station Strada Statale 31/bis 13039 Trino (VC)	Davide Galli phone +39 0161 827250 fax +39 0161 805275 email galli@sogin.it
CAORSO BWR – 860 MWe AMN-GETSCO Operation start 1978 Shutdown 1986	Caorso Power Station Via E. Fermi 5/A 29012 Caorso (PC)	Renzo Guerzoni phone +39 0523 818306 fax +39 0523 818469 email guerzoni@sogin.it
GARIGLIANO BWR – 150 MWe G.E design Operation start 1964 Shutdown 1978	Garigliano Power Stastion Via Appia, km 160 + 400 81037 S Vendltto – Sessa Aurunca (CE)	Severino Alfieri phone + 39 0823 055900 fax +39 0823 055934 email alfieri@sogin.it
LATINA Gas-Graphite – 153 MWe TNPG design Operation start 1963 Shutdown 1986	Latina Power Station Via Macchiagrande, 6 04010 Borgo Sabotino (LT)	Emilio Macci Phone +39 0773 647201 fax +39 0773 648455 email macci@sogin.it
Saluggia fuel research fuel fabrication (undergoing decommissioning)	Saluggia Facility Strada per Crescentino, snc 13040 Saluggia (VC)	Michele Gili phone +39 0161 653385 fax +39 0161 653221 email gili@sogin.it
Bosco Marengo Commercial fuel fab facility (undergoing decommissioning)	Bosco Marengo Facility S.S. 35bis dei Giovi. km 15 15062 Bosco Marento (AL)	Nicola Cantoro phone +39 0131 490223 fax +39 0131 490315 email cantoro@sogin.it
Casaccia Research including fuel fab (undergoing decommissioning)	Casaccia Research Center Via Anguillarese, 301 00060 Santa Maria di Galeria (RM)	Vittorio Santinelli phone +39 06 99819369 fax +39 06 99819759 Email santinelli@sogin.it
Trisaia Pilot fuel processing plant (undergoing decommissioning)	Trisaia Facility S.S. 106 Ionica, km 419 + 500 75026 Rotondella (MT)	Tommaso Candelieri phone +39 0835 803221 fax +39 0835 803365

Item 10 – Description of Radioactive Materials, Sealed Sources, Nuclear Facilities, Equipment or Components

EnergySolutions understands that an export license is a requirement for issuance of an import license authorizing receipt of radioactive wastes. This application is submitted in conjunction with an application for an import license for the same facilities (as EnergySolutions' reference # IT-IM-2007-09). We are requesting a generic license to allow the return export of up to approximately 1,000 tons of radioactively contaminated waste material including metals, dry activity material such as wood, paper, and plastic, liquids such as aqueous and organic based fluids, ion exchange resins (treated and untreated). Total volume will not exceed 100,000 cubic feet (assuming a nominal density of 40 pounds per cubic foot). Although not directly applicable to handling in Italy, returned wastes will be classified in accordance with guidance from Part 61 of Title 10.

Rec'd 9-17-07
PG

Page 4 of 4

NRC FORM 7
(6-2005)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT/IMPORT
LICENSE, AMENDMENT, OR RENEWAL (Continued)

LICENSE NUMBER XW013	DOCKET NUMBER 11005710	ADAMS ACCESSION NUMBER	☑ PUBLIC OR ☐ NON-PUBLIC

ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Item 10, continued

To minimize the potential for return shipments, waste descriptions and data for all candidate wastes will be carefully reviewed by a multi-disciplinary team to ensure compliance with the applicable acceptance criteria of our Tennessee and Utah facilities. Each shipment will be subject to individual review and approval prior to EnergySolutions authorizing import to our facilities.

Maximum activity requested for export is nominally 10% of the activity requested for import in application IT-IM-2007-09 as follows:

1	Atomic numbers #3 – 83	≤ 20 TBq,
2	tritium	≤ 40 TBq,
3	U-nat & Depleted U:	≤ 2 TBq (or approx 1.0+5 kg of source material)
4	Transuranics (except Pu):	≤ 2 TBq,
5	SNM (U and Pu)	≤ 0.35 kilograms, ^{235}U-equivalent (e.g. 1 g Pu = 1.75 g ^{235}U)

Rec'd 9-17-07
PB

Attachment E

ENERGY*SOLUTIONS*

CD07-0383

December 5, 2007

Mr. Stephen Dembek
Office of International Programs
U.S. Nuclear Regulatory Commission
Mail Stop O4E21
11555 Rockville Pike
Rockville, MD 20852

Subject: Response to NRC request for additional information dated November 29, 2007

Dear Mr. Dembek:

In a letter dated November 29, 2007, the U.S. Nuclear Regulatory Commission (NRC) requested additional information regarding Energy*Solutions*' import/export license application dated September 14, 2007. The following letter provides the information requested.

NRC Question 1

Although the application for the import license indicates that "No hazardous wastes (as defined by USEPA in 40 CFR 261.3) or mixed wastes (hazardous and radioactive) are included in the request," it also indicates that generators could include "facilities equivalent to US Superfund sites." Please identify which of the sites listed are "equivalent to US Superfund sites" and how you will ensure that no hazardous or mixed wastes will be included.

Energy*Solutions* Response

The following sites may be comparable to Superfund sites:

- Saluggia fuel research facility
- Casaccia research facilty
- Trisaia pilot fuel reprocessing facility

Before any of the material leaves the host country Energy*Solutions* would ensure that all of the imported waste will meet the processing and disposition requirements of its licensed facilities in Tennessee and Utah by subjecting the material to extensive waste characterization at the generator site. Our waste acceptance guidance documents have been provided to the customer to clearly communicate acceptable waste forms and activity levels. We have reviewed the extensive characterization data available and have taken the additional step to have sample analyses performed at a U.S. laboratory. Energy*Solutions* will have qualified personnel on-site working with the customer on characterization, packaging, and inspection at the generator site to ensure that all wastes

423 West 300 South, Suite 200 • Salt Lake City, Utah 84101
801.649.2000 • Fax: 801.321.0453 • www.energysolutions.com

imported to the United States meet the requirements of the import license and our licenses for the Bear Creek and Clive facilities. In addition, all material will be packaged and shipped in accordance with the IAEA and U.S. DOT shipping requirements and the NUREG/BR-0204 manifesting guidance.

NRC Question 2

The import application also states "Radioactive material content of each shipment will be subject to review and approval prior to shipment to our Tennessee facilities to ensure possession limits are not exceeded." According to the export application "To minimize the potential for return shipments, waste descriptions and data for all candidate wastes will be carefully reviewed by a multi-disciplinary team to ensure compliance with the applicable acceptance criteria of our Tennessee and Utah facilities. Each shipment will be subject to individual review and approval prior to Energy*Solutions* authorizing import to our facilities."

Will Energy*Solutions* employees from Tennessee be part of the multi-disciplinary team that will review and approve the radioactive material content of each shipment? What methods will be employed to review, approve and document the contents of each prospective shipment from Italy to the U.S.? The applicant should describe in detail the process by which the determinations required in 10 CFR 110.32 (c) (5) and (6) will be made prior to radioactive waste leaving Italy in order to ensure a very high probability that the waste can ultimately be disposed of in the U.S. Particular attention should be paid to the waste classification requirements in 10 CFR 61.55 because of uncertainties related to future disposal of Class B and C waste.

Energy*Solutions* Response

Yes, Energy*Solutions* employees from Tennessee and Utah will participate in characterizing the material in Italy and will ensure that all of the imported material will meet the license requirements at Bear Creek and Clive. Therefore, none of the imported material will have to be returned to Italy. Attachment 1 provides the procedures that will be followed during these activities.

NRC Question 3

Will most or all material from Italy be shipped directly to one of the Tennessee facilities for inspection, etc? Will any be shipped directly to the Utah facility, and if so, how much (volume and physical/chemical form and waste class)?

Energy*Solutions* Response

All material will be inspected in Italy before importation into the United States and will be transported to the Bear Creek facility in Tennessee. None of the material will be transported directly to the Clive, Utah facility nor will any of the material be dispositioned at the Barnwell facility.

NRC Question 4

"Wastes approved by EnergySolutions for processing will meet Class A requirements following completion of processing. In the unlikely event final waste forms exceed Class A limits and cannot be disposed domestically, they will be returned to the generator under the associated export license." This statement seems to imply that Energy*Solutions* has the capacity to process most waste from reactor operations which often are classified as Class B and C waste to Class A. If this is the intent, please describe the processes and impacts on waste volume that will be employed for the operational waste (e.g. resins and filter cartridges) with a high probability of originally being classified as higher than Class A.

Although the export license application was filed for contingency purposes, do the foregoing statements mean that Class B and C and possibly Greater Than Class C wastes, which cannot be processed at one of the Tennessee sites to meet Class A requirements, will all be returned from Tennessee only to the generator or is it possible that any such material will be shipped from the Utah facility back to the generator? Is there a possibility that Class B, C and Greater Than Class C wastes will be processed at the Tennessee facilities and returned to Italy in "a more stable waste form?"

Energy*Solutions* Response

Energy*Solutions* cannot process "most waste from reactor operations ....classified as Class B or Class C waste". Using routine process controls to limit final ash container dose rates, we can meter flowable Class B or C materials, such as carbon slurry, into the incinerator with the resultant ash being Class A material. Energy*Solutions* follows the NRC Branch Technical Position on Concentration Averaging for evaluation of final waste forms.

We will thoroughly inspect and characterize the waste in Italy to ensure that all wastes entering into the U.S. meet the requirements of the Bear Creek and Clive facility licenses. No Class B, Class C or GTCC materials will be shipped to Utah. Since all of the imported material will meet our licenses either at Bear Creek or Clive, none of the material will need to be returned to Italy.

NRC Question 5

"No shipments containing Highway Route Controlled quantities of radioactive material are anticipated." Who and how will you ensure that there will be no such shipments and what will happen if there are?

Energy*Solutions* Response

Our on-site characterization in Italy will preclude such material from being imported and therefore there will be no shipments containing HRC quantities.

NRC Question 6

The statement "Appropriate notifications will be made and controls implemented for shipments that exceed the threshold for Appendix P Category 2 quantities". This seems to imply that ES is anticipating such shipments. If so, please provide assurance that all applicable parties meet the requirements of 10 CFR 110.45 (c)(1).

Energy*Solutions* Response

The characterization work that will be performed in Italy should ensure that we do not receive any Category 2 shipments. However, in the very unlikely event that one is imported, we will follow established procedures and regulatory requirements.

NRC Question 7

"Following inspection and appropriate processing activities, waste materials meeting Clive disposal Waste Acceptance Criteria will be disposed at Clive, Utah as customer waste." What is "customer waste?" Further, please indicate the disposition pathway of all waste that does not meet the Clive WAC.

Energy*Solutions* Response

Customer waste is attributable, for purposes of disposal tracking, to the original generator.

All material imported from Italy will either be recycled, incinerated or otherwise processed using U.S. technology at the Bear Creek, TN facility. Only a small fraction of the material imported will be disposed in the U.S. Approximately 33% (by weight) of the material will be recycled. This material is primarily metal that will be melted and formed into shield blocks which will be sold and used throughout the nuclear industry. Approximately 67% (by weight) will be processed at Bear Creek. Only about 8% (by volume) of the total imported material is estimated to be disposed of at the Clive, Utah facility.

NRC Question 8

"You propose to import up to 20,000 tons or approximately 1,000,000 cubic feet (assuming a nominal density of 40 pounds per cubic foot) of material contaminated with varying quantities, types and combinations of source, special nuclear and byproduct materials." Please estimate the maximum total mass and volume of material and the relevant physical and chemical characteristics of the radioactive contaminants that will be disposed of as customer waste.

Energy*Solutions* Response

Following is an estimated distribution of materials we expect to receive. All shipments will be conservatively manifested, packaged and shipped to ensure that only materials authorized under our Tennessee and Utah radioactive materials licenses will be imported and received at these facilities. We will conform to applicable IAEA and USDOT shipping requirements, and the NUREG/BR-0204 manifesting guidance. As stated earlier, all materials will be routed through our Bear Creek facility in Tennessee. Material forms are broadly described as metals, dry active waste (DAW) or liquids, as these are the principal physical considerations in packaging, handling, and processing. As these physical quantities are not routinely monitored or tracked, we do not intend these values to be restrictions on individual waste forms. In addition, the physical characteristics have no impact on worker or environmental health and safety. Total mass and radionuclide activity received will be closely monitored relative to authorized values to ensure authorized amounts are not exceeded.

Approximately 7,000 tons, or nominally one-third of the projected total mass to be imported, is expected to be metals. Although we intend to beneficially reuse most of the metals via our licensed shielding fabrication facility in Tennessee, we have included metal as a waste stream rather than importing it separately under the Part 110 General License provisions for the import of resource materials contaminated with incidental quantities of radioactive material (IRM). Radioactive contaminants are expected to be in form of solid metal oxides, principally byproduct material (fission and activation products) originating in light water and gas-cooled power reactor facilities undergoing decommissioning. This material is expected to contain nominally half of the byproduct materials projected in the license application, with only traces of source or special nuclear material (SNM). Structural steel, conduit, tanks, moderator metals, piping and valves are expected to comprise most of the metals. A small metals subset, not expected to exceed a few hundred tons, may originate from commercial fuel fabrication facilities undergoing decommissioning. These metals are expected to contain source material and/or low-enriched uranium and mixed oxide fuel contamination in the form of metal oxides or contamination from fired ceramic material. These fuel facility metals are expected to account for a significant fraction of the source material and SNM activity requested in section 15 of the submitted USNRC Form 7, blocks 15a – 15c. Note that in no case will operable reactor components or fuel fabrication equipment be imported for use or transfer for use. The total volume of metals shipped from Italy is expected to be about 200,000 to 300,000 ft^3.

DAW is expected to account for 5,000 tons of the requested 20,000 tons. This material will include cotton rags and personal protective clothing (PPE), ventilation filters, paper, plastic, wood, and ion exchange resins. This material is expected to account for up to one-half of the requested byproduct material activity, again with only low levels of source material and SNM. The total volume of DAW shipped from Italy is expected to be about 300,000 to 400,000 ft^3. Approximately 20% of the DAW is expected to originate from fuels-related facilities, and will contain low levels of uranium and mixed oxide fuel contamination in the form of metal oxides (no nitrates or reactive forms are anticipated).

Aqueous liquids, including water/resin mixtures, and organic liquids (primarily non-hazardous electro-hydraulic control fluid [EHC oil] and lubricating oils meeting acceptance criteria) are expected to make up the remainder of the mass to be received and will be primarily contaminated with byproduct material, again with traces of source material and SNM. These are also expected to originate primarily from power reactor facilities undergoing active decommissioning.

We appreciate the opportunity to respond to these questions. If you have any further questions regarding this matter, please contact me at (801) 649-2114.

Sincerely,

Tye Rogers

Tye Rogers
Sr. Vice President, Regulatory Affairs

Attachment 1

cc: Brooke Smith and Carlotta Coates

ENERGYSOLUTIONS

CD08-0014

January 11, 2008

Mr. Stephen Dembek
Office of International Programs
U.S. Nuclear Regulatory Commission
Mail Stop O4E21
11555 Rockville Pike
Rockville, MD 20852

Subject: Supplemental Request for Additional Information Regarding License Applications: IW023 & XW013

Dear Mr. Dembek

In a letter dated December 20, 2007, the Nuclear Regulatory Commission requested additional information (RAI) regarding EnergySolutions' license application IW023 and XW013. The following letter provides the additional information requested.

NRC Question 1:

In EnergySolutions' December 5, 2007 response to NRC's question 4, EnergySolutions states, "No Class B, Class C or GTCC materials will be shipped to Utah. Since all the imported material will meet our licenses either at Bear Creek or Clive, none of the material will need to be returned to Italy." This response would seem to imply the possibility of long-term storage of Class B, C and GTCC waste at Bear Creek. The possibility of long-term storage is mentioned in the original application as well (Item 15, page 4, Processing section). Please clarify, the type, amount and activity of waste (if any) that will require long-term storage.

EnergySolutions Response:

There will be no long-term storage of Class B, C or GTCC waste at the Bear Creek facility. Long-term storage is not authorized under our Tennessee Radioactive Materials Licenses. Before any material leaves Italy, EnergySolutions will subject it to an extensive waste characterization. EnergySolutions will ensure that all of the imported material will comply with its licenses at either Bear Creek or Clive. The material will be recycled, processed and/or disposed.

NRC Question 2:

In EnergySolutions' December 5, 2007 response to NRC's question 7, EnergySolutions states, "Only about 8% (by volume) of total imported material is estimated to be disposed of at the Clive, Utah facility." This statement appears to contradict a statement in Block 15 in the application that suggests the waste is imported "primarily for processing and/or disposal in accordance with EnergySolutions existing Utah disposal license." Please address this apparent contradiction.

EnergySolutions Response:

The imported material will be processed primarily through incineration, volume reduction or other processing methods. A significant amount of the material will be recycled and formed into shield blocks to be reused in the nuclear industry. The remaining material, approximately 8% by volume, will be disposed of at the Clive, Utah facility. More details of the amounts and disposition pathways are provided in response to Question 6.

The initial license application was written to provide flexibility for EnergySolutions to determine the most efficient pathway during material management activities. In response to the NRC first RAI, estimated disposition pathways percentages were provided. These values were best estimates and are not a committed maximum.

NRC Question 3:

In EnergySolutions' December 5, 2007 response to NRC's question 8, EnergySolutions discusses the possible beneficial reuse of 7000 tons of metal as shielding material. EnergySolutions should provide some indication regarding the domestic market for the types and quantities of shielding that can be remanufactured from waste steel and moderator metals. *Please identify any detailed information in the response to this request for which EnergySolutions requires confidentiality.*

EnergySolutions Response:

The company's current customer for shield blocks is in Japan. The existing contract is to fabricate 500 shield blocks (approximately 10 tons each). The company has an option under the contract to provide up to 350 additional blocks. The company anticipates using imported material from Italy to fulfill this contract. In addition, the company is exploring opportunities domestically for the shield blocks and may use some of the shield blocks in-house.

NRC Question 4:

Throughout the original application and responses provided on December 5, 2007, there seems to be an implication that some waste that may otherwise be classified as class B or C can and will be processed to meet the Clive, Utah waste acceptance criteria (WAC). If this is the case, it suggests an increase in the volume of waste to be disposed of. Please clarify EnergySolutions intentions and likely volume impact regarding processing of Class B and C waste to meet the Clive WAC.

EnergySolutions Response:

EnergySolutions will receive and process the material in accordance with our Tennessee Radioactive Materials License. Processing at Bear Creek does not increase waste volumes and EnergySolutions will ensure that the material destined for disposal at Clive will meet the WAC.

The material that will be received at Bear Creek will be extensively characterized prior to its importation but not classified for disposal. Those materials destined for incineration and metal melting are not received in final form for disposal and therefore waste classification at this point in the process would be premature. Please refer to the March 27, 1995 Federal Register (page 15652) for discussion of manifesting to incineration facilities. Incinerator ash is arguably a new waste stream (a processor residual waste, as defined by specific licensing actions), as it is physically, chemically, and radiologically modified, relative to the input stream. The same considerations are applicable to slag and waste products resulting from metal melting activities.

Processing activities are performed in accordance with our Tennessee and Utah Radioactive Materials licenses. Routine operations at Bear Creek typically include adjusting mixtures of materials to achieve efficient processing. These adjustments include managing thermal properties (i.e., BTU content) of feed material for incineration and blending of metals to achieve desired molten metal bath chemistry for metals casting work. We also meter higher activity materials into our processes along with lower activity materials to control secondary waste and cast product dose rates, with resultant control over radionuclide concentrations. Such processing does not increase waste volumes.

NRC Question 5:

The application and December 5, 2007 responses are fairly consistent in identifying three major waste streams: 7000 tons of metal, 5000 tons of DAW, and 8000 tons of liquid, or wet, waste. (An average density of 40 pounds per cubic foot is used to estimate volume although these three waste streams individually differ significantly from that average density.) The material also indicates three distinct disposition pathways for the waste: recycle/reuse, disposal, and long-term storage. With the exception of metals, it is less clear with regard to the approximate percentage of each waste stream that ends up in each disposition pathway. Please provide clarification as to the likely disposition pathway of each major waste stream.

EnergySolutions Response:

In our December 5, 2007 letter, we estimated that approximately 33%, by weight, of the material will be recycled. Approximately 67% of the material, by weight, (metals, graphite, resins, DAW and liquids) will be processed using incineration, drying processes (drying ovens), and compaction for dewatering and volume reduction at the Bear Creek facility and of that amount, approximately 8%, by volume, will be disposed at the Clive facility (metals, graphite, resins and DAW). Further processing details are provided in response to Question 6. As stated in Question 2, these values were best estimates and are not a committed maximum.

NRC Question 6:

Please describe the disposition of all Italian waste, including that which normally would be ascribed to the Bear Creek facility after processing. There are some conventions used in waste processing whereby the identity of the original generator disappears during processing because the waste becomes commingled (during incineration, e.g.). Please estimate the amount and method of Italian waste that will be dispositioned, including that which would normally be ascribed to the Bear Creek facility.

EnergySolutions Response

The following provides the estimated disposition paths and amounts for each of the different waste types. These values are best estimates and are not a committed maximum.

METAL

Most of the metal material will be recycled using the metal-melt process. This represents approximately 33-40% (by weight) of the Italy material. Negligible residual volumes result from this process that would need to be disposed at the Clive facility. None of the recycled metals will be released for unrestricted use. It will be beneficially reused within the nuclear industry.

Metals that are not suitable for recycling (copper, aluminum and etc.) will be volume reduced (by more than a factor of 4) by supercompaction or metal baler and transported to the Clive facility for disposal. This represents approximately 20-27% (by weight) of all the Italy material. The residual waste produced through this process that will be disposed at the Clive facility is approximately 3-5% (by volume) of all the Italy material. This value may decrease if more metal is found to be suitable for recycling.

GRAPHITE

The graphite will be repackaged and transported to Clive for disposal. This represents approximately 15% (by weight) of all the Italy material. The residual waste produced through this process that will be disposed at the Clive facility is approximately 3% (by volume) of all the Italy material.

RESINS

The resins will be incinerated or repackaged at Bear Creek facility and resultant waste will be disposed at the Clive facility. This represents approximately 5% (by weight) of all the Italy material. The residual waste produced through this process that will be disposed at the Clive facility is approximately 0.5% (by volume) of all the Italy material.

DAW
The DAW will be processed through incineration which will reduce the volume by more than a factor of 200. This represents approximately 15% (by weight) of all the Italy material. The residual waste produced through this process that will be disposed at the Clive facility is approximately 0.2% (by volume) of all the Italy material.

LIQUIDS
The liquids will be incinerated and negligible residual waste results that would need further disposal. This represents approximately 5% (by weight) of the Italy material.

NRC Question 7:

Please clarify whether any material that originates in Italy and imported into the United States will be disposed of in municipal landfills (non-NRC/non-Agreement State regulated) in the United States.

EnergySolutions Response:

None of the material imported from Italy by EnergySolutions will be disposed of in municipal landfills in the United States. Furthermore, none of the material will be disposed of at the Barnwell facility in South Carolina nor will any of the material be disposed of at the Bear Creek facility in Tennessee.

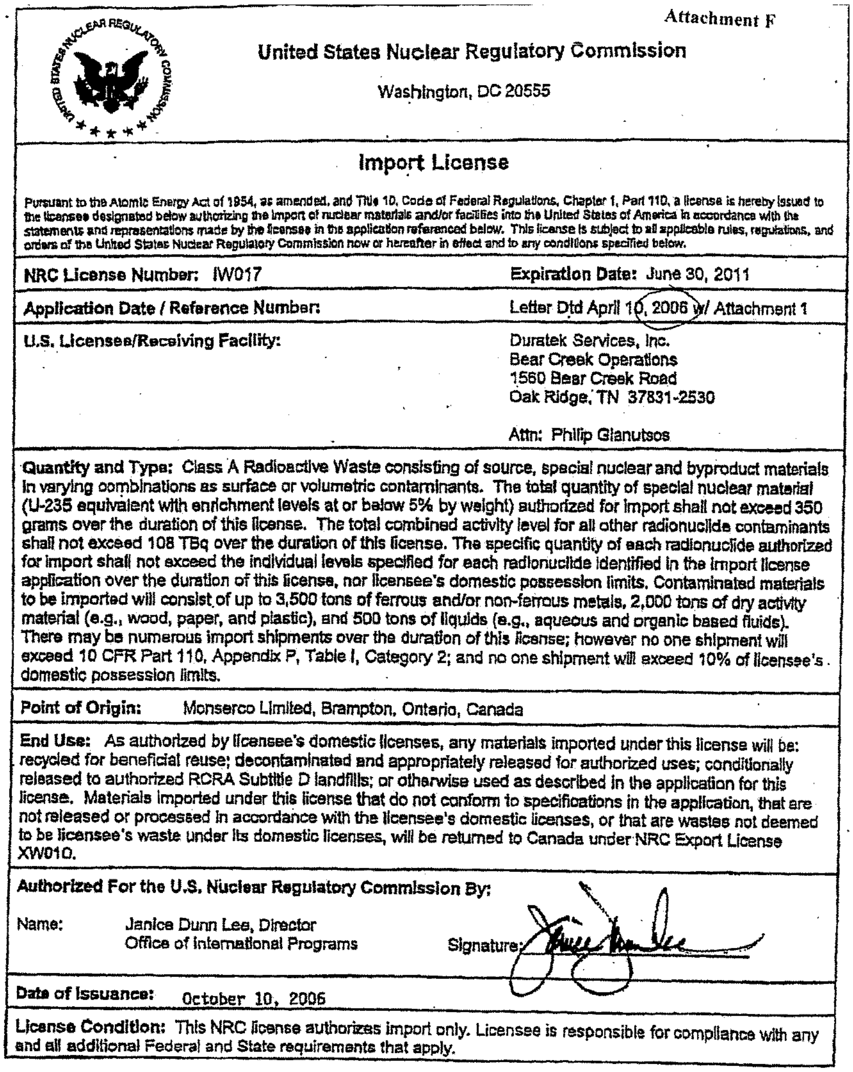
Please contact me at (801) 649-2114 should you have any questions concerning this matter.

Sincerely,

Tye Rogers

Tye Rogers
Sr. Vice President, Regulatory Affairs

cc: Brooke Smith and Carlotta Coates



Attachment F

United States Nuclear Regulatory Commission

Washington, DC 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW017 **Expiration Date:** June 30, 2011

Application Date / Reference Number: Letter Dtd April 10, 2006 w/ Attachment 1

U.S. Licensee/Receiving Facility:

Duratek Services, Inc.
Bear Creek Operations
1560 Bear Creek Road
Oak Ridge, TN 37831-2530

Attn: Philip Gianutsos

Quantity and Type: Class A Radioactive Waste consisting of source, special nuclear and byproduct materials in varying combinations as surface or volumetric contaminants. The total quantity of special nuclear material (U-235 equivalent with enrichment levels at or below 5% by weight) authorized for import shall not exceed 350 grams over the duration of this license. The total combined activity level for all other radionuclide contaminants shall not exceed 108 TBq over the duration of this license. The specific quantity of each radionuclide authorized for import shall not exceed the individual levels specified for each radionuclide identified in the import license application over the duration of this license, nor licensee's domestic possession limits. Contaminated materials to be imported will consist of up to 3,500 tons of ferrous and/or non-ferrous metals, 2,000 tons of dry activity material (e.g., wood, paper, and plastic), and 500 tons of liquids (e.g., aqueous and organic based fluids). There may be numerous import shipments over the duration of this license; however no one shipment will exceed 10 CFR Part 110, Appendix P, Table I, Category 2; and no one shipment will exceed 10% of licensee's domestic possession limits.

Point of Origin: Monserco Limited, Brampton, Ontario, Canada

End Use: As authorized by licensee's domestic licenses, any materials imported under this license will be: recycled for beneficial reuse; decontaminated and appropriately released for authorized uses; conditionally released to authorized RCRA Subtitle D landfills; or otherwise used as described in the application for this license. Materials imported under this license that do not conform to specifications in the application, that are not released or processed in accordance with the licensee's domestic licenses, or that are wastes not deemed to be licensee's waste under its domestic licenses, will be returned to Canada under NRC Export License XW010.

Authorized For the U.S. Nuclear Regulatory Commission By:

Name: Janice Dunn Lee, Director
Office of International Programs

Signature:

Date of Issuance: October 10, 2006

License Condition: This NRC license authorizes import only. Licensee is responsible for compliance with any and all additional Federal and State requirements that apply.

IW017
Page 1 of 1

Duratek™

1560 Bear Creek Road
Oak Ridge, Tennessee 37831
phone 865-481-0222 fax 865-482-7206
www.duratekinc.com

April 10, 2006

Ms. Margaret Doane
Deputy Director
Office of International Programs
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Applications for 1) Specific License to Import Radioactive Material
2) Specific License to Export Radioactive Material

Dear Ms. Doane:

Duratek requests a specific license to import potentially radioactively contaminated metal from Canada to Duratek's facility in Oak Ridge, Tennessee for processing under Duratek's Tennessee licenses. Duratek also requests a specific license to authorize the export of radioactive waste generated from this processing to the extent necessary back to Canada.

This license is a generic license to allow the importation of up to 6000 tons of radioactively contaminated material including metals, dry activity material such as wood, paper, and plastic, and liquids such as aqueous and organic based fluids. The sources of this material are not fully known as of the date of this application but will be limited to Canadian facilities authorized by Canada to use and possess radioactive material such as reactors, fuel cycle facilities, and material licensees or facilities equivalent to US Superfund sites. It is expected that the material to be imported would be generated during various activities such as remediation, decontamination, decommissioning, maintenance, equipment upgrades, and routine operational activities. Some of the material to be imported will be free from contamination, some may only be surficially contaminated, and some may be volumetrically contaminated.

The purpose of the import license is to import potentially contaminated material for beneficial reuse by 1) recycling metals for reuse as much of the metal as possible; 2) incinerating liquids and dry activity material to generate energy (i.e., steam) to use in Duratek's operations; and 3) using liquids for cooling purposes in Duratek's operations. Some decontamination work maybe involved. The purpose of the export license is to allow waste that is attributable to Canadian sources under this import license to be exported back to Canada.

Duratek™
1560 Bear Creek Road
Oak Ridge, Tennessee 37831
phone 865-481-0222 fax 865-482-7206
www.duratekinc.com

April 10, 2006

Ms. Margaret Doane
Deputy Director
Office of International Programs
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Applications for 1) Specific License to Import Radioactive Material
2) Specific License to Export Radioactive Material

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Duratek requests a specific license to import potentially radioactively contaminated metal from Canada to Duratek's facility in Oak Ridge, Tennessee for processing under Duratek's Tennessee licenses. Duratek also requests a specific license to authorize the export of radioactive waste generated from this processing to the extent necessary back to Canada.

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Applications for – 1) Specific License to Import Radioactive Material
2) Specific License to Export Radioactive Material

The applications are attached in Attachments 1, 2, and 3. We assume NRC will appropriately delete possession limit information in the interest of materials security prior to making these documents publicly available. We are enclosing a check in the amount of $15,000 to address the fees for two applications specified in 10 CFR 170.31, Category 15 B., assuming Executive Branch, but not Commission review, is required for each application.

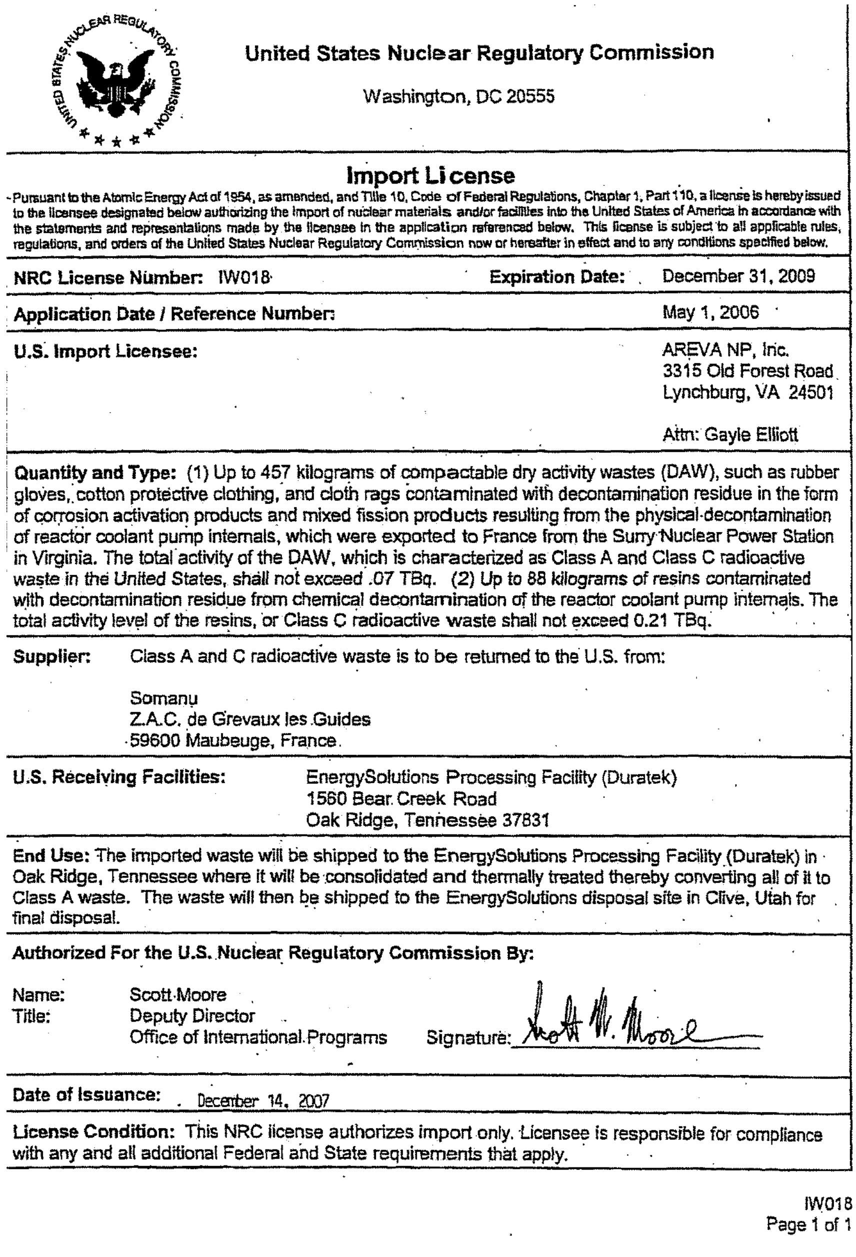
If you have any questions or need additional information, please do not hesitate to call me at 865-220-1478.

Respectfully submitted,

Phil Gianutsos

Philip Gianutsos, CHP
Radiation Safety Officer
Duratek Services, Inc.

Attachments:
1) Import Application
2) Export Application (Form 7)
3) Addendum to Export Application



United States Nuclear Regulatory Commission

Washington, DC 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW018 **Expiration Date:** December 31, 2009

Application Date / Reference Number: May 1, 2006

U.S. Import Licensee:

AREVA NP, Inc.
3315 Old Forest Road
Lynchburg, VA 24501

Attn: Gayle Elliott

Quantity and Type: (1) Up to 457 kilograms of compactable dry activity wastes (DAW), such as rubber gloves, cotton protective clothing, and cloth rags contaminated with decontamination residue in the form of corrosion activation products and mixed fission products resulting from the physical decontamination of reactor coolant pump internals, which were exported to France from the Surry Nuclear Power Station in Virginia. The total activity of the DAW, which is characterized as Class A and Class C radioactive waste in the United States, shall not exceed .07 TBq. (2) Up to 88 kilograms of resins contaminated with decontamination residue from chemical decontamination of the reactor coolant pump internals. The total activity level of the resins, or Class C radioactive waste shall not exceed 0.21 TBq.

Supplier: Class A and C radioactive waste is to be returned to the U.S. from:

Somanu
Z.A.C. de Grevaux les Guides
59600 Maubeuge, France.

U.S. Receiving Facilities:

EnergySolutions Processing Facility (Duratek)
1560 Bear Creek Road
Oak Ridge, Tennessee 37831

End Use: The imported waste will be shipped to the EnergySolutions Processing Facility (Duratek) in Oak Ridge, Tennessee where it will be consolidated and thermally treated thereby converting all of it to Class A waste. The waste will then be shipped to the EnergySolutions disposal site in Clive, Utah for final disposal.

Authorized For the U.S. Nuclear Regulatory Commission By:

Name: Scott Moore
Title: Deputy Director
Office of International Programs
Signature: Scott W. Moore

Date of Issuance: December 14, 2007

License Condition: This NRC license authorizes import only. Licensee is responsible for compliance with any and all additional Federal and State requirements that apply.

IW018
Page 1 of 1

October 24, 2007

Mr. Michael Garner, Executive Director
Northwest Interstate Compact on
Low-Level Radioactive Waste Management
Department of Ecology
State of Washington
P.O. Box 47600
Olympia, WA 98504-7600

SUBJECT: APPLICATION FOR NRC IMPORT LICENSE (IW018)

Dear Mr. Garner:

Enclosed for your consideration is an application for a license (IW018), received by the U.S. Nuclear Regulatory Commission (NRC) from AREVA NP Inc. (AREVA), concerning imports of U.S.-origin radioactive waste from France. The license will allow for the import, transport, processing and disposal of up to 457.0 kilograms of dry Class A waste contaminated with various radionuclides and up to 88.0 kilograms of Class C contaminated resins. The waste was generated as a result of the French decontamination and restoration of portions of an U.S.-owned Reactor Coolant Pump (RCP).

AREVA will consolidate and thermally treat its RCP-related waste at Duratek in Tennessee (converting it all to Class A), and transport the Class A material to the EnergySolutions site in Clive, Utah for disposal.

Public Notice that the NRC received this application was published in the Federal Register on August 1, 2006. In addition, the NRC forwarded AREVA's request to the U.S. Department of State on June 2, 2006, for assistance in notifying the Government of France of the transactions proposed. The NRC also requested the State Department's views as to whether approving the license would be consistent with the guidelines in the Joint Convention on the Safety of Spent Fuel Management and Safety of Radioactive Waste Management.

We are also forwarding a copy of this request to the Southeast Compact Commission and the States of Tennessee and Utah for their consideration.

It would be greatly appreciated if within two weeks of the date of this letter, you could respond with any comments you may have concerning the import request, or if necessary, provide an estimate of how much additional time may be required to complete your review and provide a written response to the NRC.

We also welcome your response by e-mail or telefax, and request that you refer to NRC license application IW018 in your response. Please send your response to Paul MacMurdy's email address (phm1@nrc.gov) or to our office telefax number at (301) 415-2395. If you respond by e-mail, please send a copy of your email response to Mr. Stephen Dembek (sxd@nrc.gov).

Should you have questions or require additional information, please feel free to contact me at (301) 415-2342 or Mr. MacMurdy at (301) 415-1690.

Sincerely,

/RA/

Stephen Dembek, Branch Chief
Export Controls and International Organizations
Office of International Programs

Docket No.: 11005628

Enclosures:
1. Appl. Letter Dated 05/01/06
2. Letter to State Dept. Dated 06/02/06
3. Federal Register Notice Dated 07/11/06

cc w/enclosures:
G. Kim, NRC/OGC
J. Davis, NRC/FSME
J. Kennedy, NRC/FSME
J. Shaffner, NRC/FSME

We also welcome your response by e-mail or telefax, and request that you refer to NRC license application IW018 in your response. Please send your response to Paul MacMurdy's email address (phm1@nrc.gov) or to our office telefax number at (301) 415-2395. If you respond by e-mail, please send a copy of your email response to Mr. Stephen Dembek (sxd@nrc.gov).

Should you have questions or require additional information, please feel free to contact me at (301) 415-2342 or Mr. MacMurdy at (301) 415-1690.

Sincerely,

/RA/

Stephen Dembek, Branch Chief
Export Controls and International Organizations
Office of International Programs

Docket No.: 11005628

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1. Appl. Letter Dated 05/01/06
2. Letter to State Dept. Dated 06/02/06
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cc w/enclosures:
G. Kim, NRC/OGC
J. Davis, NRC/FSME
J. Kennedy, NRC/FSME
J. Shaffner, NRC/FSME

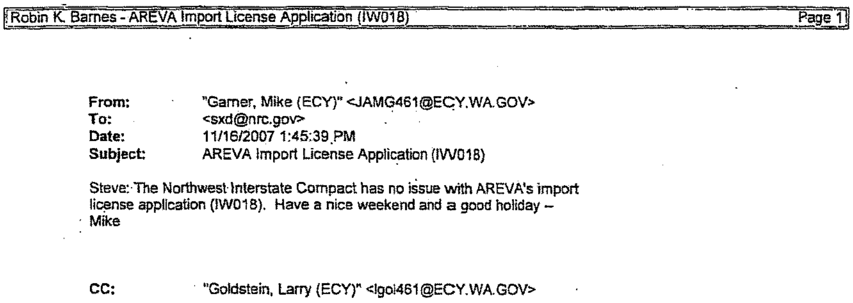
DOCUMENT NAME: S:\Imports - States-Compacts\IW018 Ltr to M Garner-NWCompact.wpd

ADAMS ACCESSION NOS.: TEMPLATE NO.: OIP-004
Package No.: ML072950090
Letter No.: ML072990305
Enclosure 1 No.: ML061500142
Enclosure 2 No.: ML061500421
Enclosure 3 No.: ML061910006

* See previous concurrence
X Publicly Available ☐ Non-Publicly Available ☐ Sensitive X Non-Sensitive

OFFICE	OIP	OIP	BC:OIP
NAME	R Barnes	J Owens *	S Dembek
DATE	10-23-07	10/24/07	10/24/07

OFFICIAL RECORD COPY



Robin K. Barnes - AREVA Import License Application (IW018) Page 1

From: "Garner, Mike (ECY)" <JAMG461@ECY.WA.GOV>
To: <sxd@nrc.gov>
Date: 11/16/2007 1:45:39 PM
Subject: AREVA Import License Application (IW018)

Steve: The Northwest Interstate Compact has no issue with AREVA's import license application (IW018). Have a nice weekend and a good holiday -- Mike

CC: "Goldstein, Larry (ECY)" <lgol461@ECY.WA.GOV>

Mail Envelope Properties (473DE546.913 : 19 : 26899)

Subject: AREVA Import License Application (IW018)
Creation Date 11/16/2007 1:45:10 PM
From: "Garner, Mike (ECY)" <JAMG461@ECY.WA.GOV>

Created By: JAMG461@ECY.WA.GOV

Recipients
nrc.gov
OWGWPO03.HQGWDO01
SXD (Stephen Dembek)

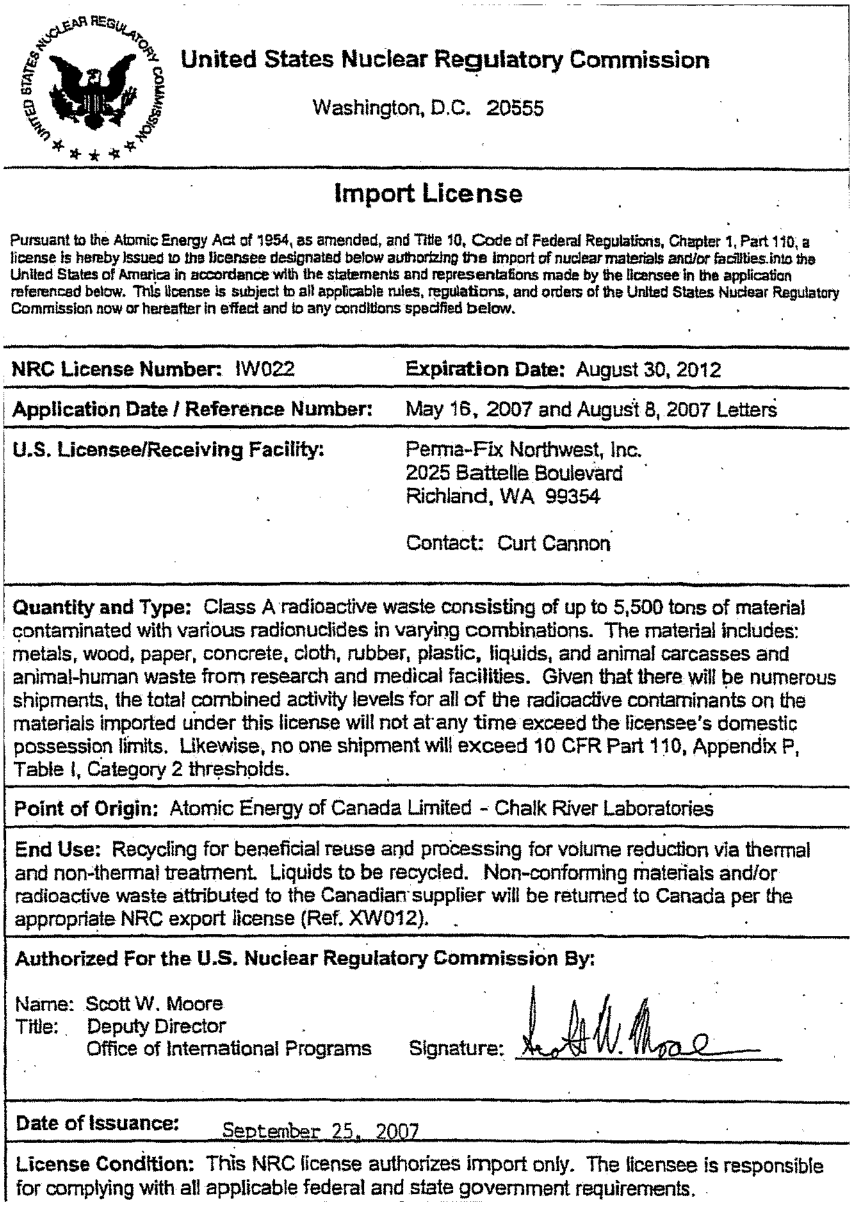
ECY.WA.GOV
lgol461 CC (Larry (ECY) Goldstein)

Post Office	**Route**
OWGWPO03.HQGWDO01	nrc.gov ECY.WA.GOV

Files	**Size**	**Date & Time**
MESSAGE	152	11/16/2007 1:45:10 PM
TEXT.htm	546	
Mime.822	2736	

Options

Expiration Date:	None
Priority:	Standard
ReplyRequested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard



United States Nuclear Regulatory Commission

Washington, D.C. 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW022 **Expiration Date:** August 30, 2012

Application Date / Reference Number: May 16, 2007 and August 8, 2007 Letters

U.S. Licensee/Receiving Facility:

Perma-Fix Northwest, Inc.
2025 Battelle Boulevard
Richland, WA 99354

Contact: Curt Cannon

Quantity and Type: Class A radioactive waste consisting of up to 5,500 tons of material contaminated with various radionuclides in varying combinations. The material includes: metals, wood, paper, concrete, cloth, rubber, plastic, liquids, and animal carcasses and animal-human waste from research and medical facilities. Given that there will be numerous shipments, the total combined activity levels for all of the radioactive contaminants on the materials imported under this license will not at any time exceed the licensee's domestic possession limits. Likewise, no one shipment will exceed 10 CFR Part 110, Appendix P, Table I, Category 2 thresholds.

Point of Origin: Atomic Energy of Canada Limited - Chalk River Laboratories

End Use: Recycling for beneficial reuse and processing for volume reduction via thermal and non-thermal treatment. Liquids to be recycled. Non-conforming materials and/or radioactive waste attributed to the Canadian supplier will be returned to Canada per the appropriate NRC export license (Ref. XW012).

Authorized For the U.S. Nuclear Regulatory Commission By:

Name: Scott W. Moore
Title: Deputy Director
Office of International Programs
Signature:

Date of Issuance: September 25, 2007

License Condition: This NRC license authorizes import only. The licensee is responsible for complying with all applicable federal and state government requirements.

August 7, 2007

Mr. Michael Garner, Executive Director
Northwest Interstate Compact on
Low-Level Radioactive Waste Management
Department of Ecology
State of Washington
P.O. Box 47600
Olympia, WA 98504

VIA TELEFAX: 360-407-7152

SUBJECT: APPLICATIONS FOR NRC IMPORT LICENSE (IW022) AND EXPORT LICENSE (XW012)

Dear Mr. Garner:

Enclosed for your consideration is a letter dated May 15, 2007 which contains two applications from Pacific EcoSolutions/Perma-Fix Environmental Services, Inc. (renamed Perma-Fix Northwest, Inc. effective June 1, 2007) for U.S. Nuclear Regulatory Commission (NRC) licenses to import and export Canadian-origin radioactive waste. As the enclosed May 15, 2007 letter-applications initially were incomplete, they officially became NRC license applications (IW022 and XW012) on June 18, 2007.

Perma-Fix Northwest, Inc. is seeking an NRC license to import a maximum of 5,500 tons – comprising approximately 1,000 tons of metal, 4,000 tons of dry activity material, and 500 tons of liquid – contaminated with radionuclides of various combinations. They indicate that the activity levels of the radioactive contaminants will not exceed licensee possession limits, and the materials will either be recycled for beneficial reuse or processed for volume reduction by thermal and nonthermal treatment. The purpose of their export license application (XW012) is to authorize the return to Canada of non-conforming imported waste or processed material that can be attributed to a Canadian generator.

The applications were forwarded to the U.S. Department of State (DOS) on July 11, 2007 for assistance in notifying the Canadian Nuclear Safety Commission of the proposed transactions. The NRC also requested DOS's views as to whether approving these applications would be consistent with the guidelines of the Joint Convention of the Safety of Spent Fuel Management and Safety of Radioactive Waste Management.

A Federal Register notice regarding these applications was published on August 1, 2007 (72 FR 421 36). We also are telefaxing an analogous letter to Mr. Gary Robertson, Director of the State of Washington's Division of Radiation Protection, to confirm that the applicant's facility is appropriately authorized to perform the activities described.

It would be greatly appreciated if within two weeks of the date of this letter, you could respond with comments, or if necessary provide an estimate of how much additional time may be required to complete your review and provide a written response to the NRC.

We also welcome your response by e-mail or telefax, and request that you refer to NRC license applications IW022 and XW012 in your response. As the Commission's point of contact for this matter, my e-mail address is jeo@nrc.gov and my telefax number is (301) 415-2395. If you respond by e-mail, please copy your response to Mr. Paul MacMurdy at phm1@nrc.gov.

Should you have questions or require additional information, please feel free to contact me at (301) 415-3684 or Mr. MacMurdy at (301) 415-1690.

Sincerely,

/RA/

Janice E. Owens, Acting Branch Chief
Export Controls and International Organizations
Office of International Programs

Enclosures:
1. Ltr. Dtd. 05/15/07 / Appl. Dtd. 05/16/07
   IW022 - Canada
   Docket Number 11005700

2. Ltr. Dtd. 05/15/07 / Appl. Dtd. 05/16/07
   XW012 - Canada
   Docket Number 11005699

cc w/encls:
J. Davis, NRC/FSME
J. Kennedy, NRC/FSME
J. Shaffner, NRC/FSME

It would be greatly appreciated if within two weeks of the date of this letter, you could respond with comments, or if necessary provide an estimate of how much additional time may be required to complete your review and provide a written response to the NRC.

We also welcome your response by e-mail or telefax, and request that you refer to NRC license applications IW022 and XW012 in your response. As the Commission's point of contact for this matter, my e-mail address is jeo@nrc.gov and my telefax number is (301) 415-2395. If you respond by e-mail, please copy your response to Mr. Paul MacMurdy at phm1@nrc.gov.

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Sincerely,

/RA/

Janice E. Owens, Acting Branch Chief
Export Controls and International Organizations
Office of International Programs

Enclosures:
1. Ltr. Dtd. 05/15/07 / Appl. Dtd. 05/16/07
   IW022 - Canada
   Docket Number 11005700
2. Ltr. Dtd. 05/15/07 / Appl. Dtd. 05/16/07
   XW012 - Canada
   Docket Number 11005699

cc w/encls:
J. Davis, NRC/FSME
J. Kennedy, NRC/FSME
J. Shaffner, NRC/FSME

DOCUMENT NAME: S:\Imports\Imports - States-Compacts\IW022-XW012 ltr to NW Compact.wpd

ADAMS ACCESSION NOS.: TEMPLATE NO.: OIP-00
Package No.: ML072140698
Letter No.: ML072140709
Enclosure 1 No.: ML071840141 (IW022)
Enclosure 2 No.: ML071840138 (XW012)

* See previous concurrence
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

OFFICE	OIP	OIP	Acting BC:OIP
NAME	R Barnes	P MacMurdy	J E Owens
DATE	8-2-07	8-6-07	8/7/07

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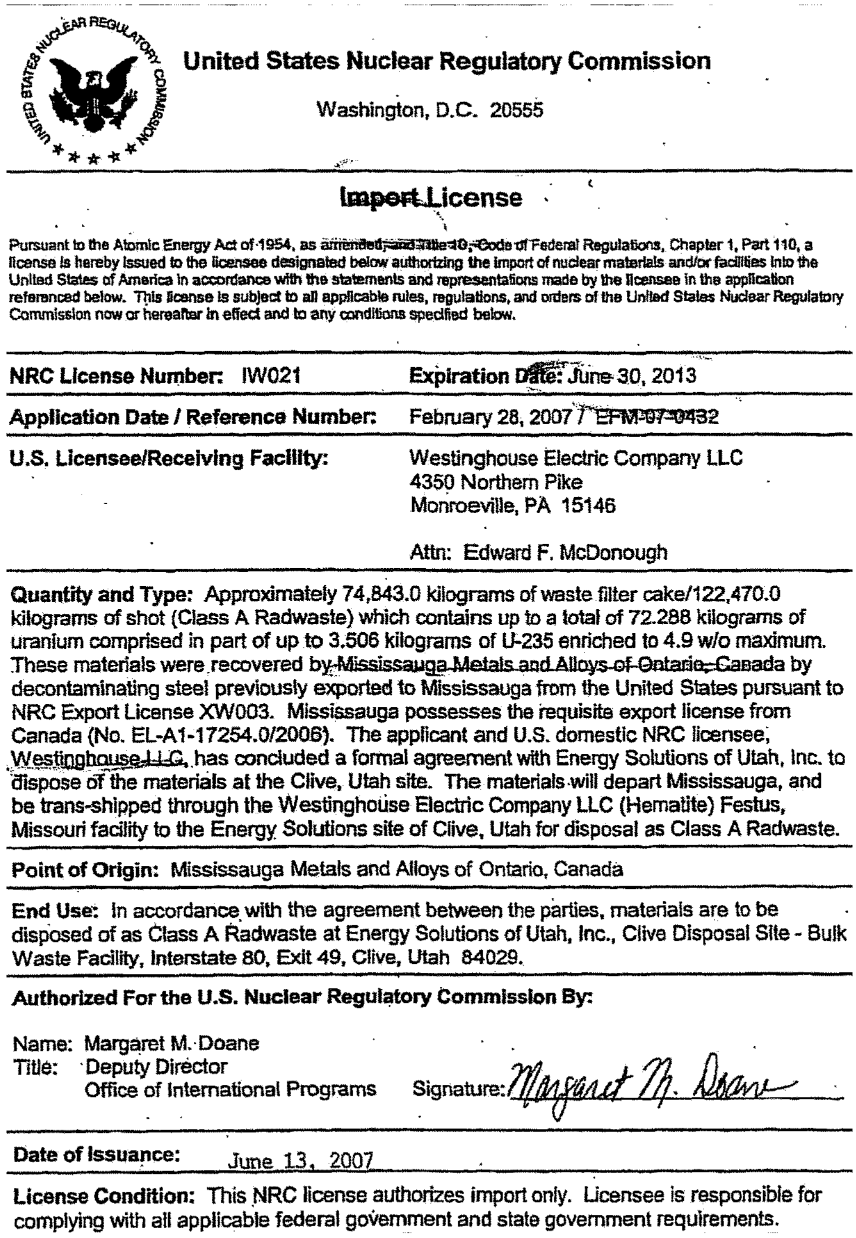


United States Nuclear Regulatory Commission

Washington, D.C. 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW021 **Expiration Date:** June 30, 2013

Application Date / Reference Number: February 28, 2007 / EFM-07-0432

U.S. Licensee/Receiving Facility:
Westinghouse Electric Company LLC
4350 Northern Pike
Monroeville, PA 15146

Attn: Edward F. McDonough

Quantity and Type: Approximately 74,843.0 kilograms of waste filter cake/122,470.0 kilograms of shot (Class A Radwaste) which contains up to a total of 72.288 kilograms of uranium comprised in part of up to 3.506 kilograms of U-235 enriched to 4.9 w/o maximum. These materials were recovered by Mississauga Metals and Alloys of Ontario, Canada by decontaminating steel previously exported to Mississauga from the United States pursuant to NRC Export License XW003. Mississauga possesses the requisite export license from Canada (No. EL-A1-17254.0/2006). The applicant and U.S. domestic NRC licensee, Westinghouse LLC, has concluded a formal agreement with Energy Solutions of Utah, Inc. to dispose of the materials at the Clive, Utah site. The materials will depart Mississauga, and be trans-shipped through the Westinghouse Electric Company LLC (Hematite) Festus, Missouri facility to the Energy Solutions site of Clive, Utah for disposal as Class A Radwaste.

Point of Origin: Mississauga Metals and Alloys of Ontario, Canada

End Use: In accordance with the agreement between the parties, materials are to be disposed of as Class A Radwaste at Energy Solutions of Utah, Inc., Clive Disposal Site - Bulk Waste Facility, Interstate 80, Exit 49, Clive, Utah 84029.

Authorized For the U.S. Nuclear Regulatory Commission By:

Name: Margaret M. Doane
Title: Deputy Director
Office of International Programs
Signature: Margaret M. Doane

Date of Issuance: June 13, 2007

License Condition: This NRC license authorizes import only. Licensee is responsible for complying with all applicable federal government and state government requirements.

1896

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF RADIATION
CONTROL
Dane L. Finerfrock
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

May 17, 2007

Mr. Stephen Dembek, Branch Chief
Export Controls and International Organizations
Office of International Programs
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: Letter dated April 30, 2007 regarding Import License Application IW021

Dear Mr. Dembek:

In your letter you requested comments as to the Energy*Solutions* authorizations to dispose of low-level radioactive wastes (LLRW) described in the application sited above. The Energy*Solutions* license (UT2300239) issued by the Division of Radiation Control, Utah Department of Environmental Quality authorizes disposal of LLRW up to the Class A limits, including the Uranium isotopes described in the application.

The Utah Radiation Control Rules, the Energy*Solutions* license or our governing Statues do not prohibit the importation of LLRW for disposal. Should you have any questions, please contact me at 801-536-4250.

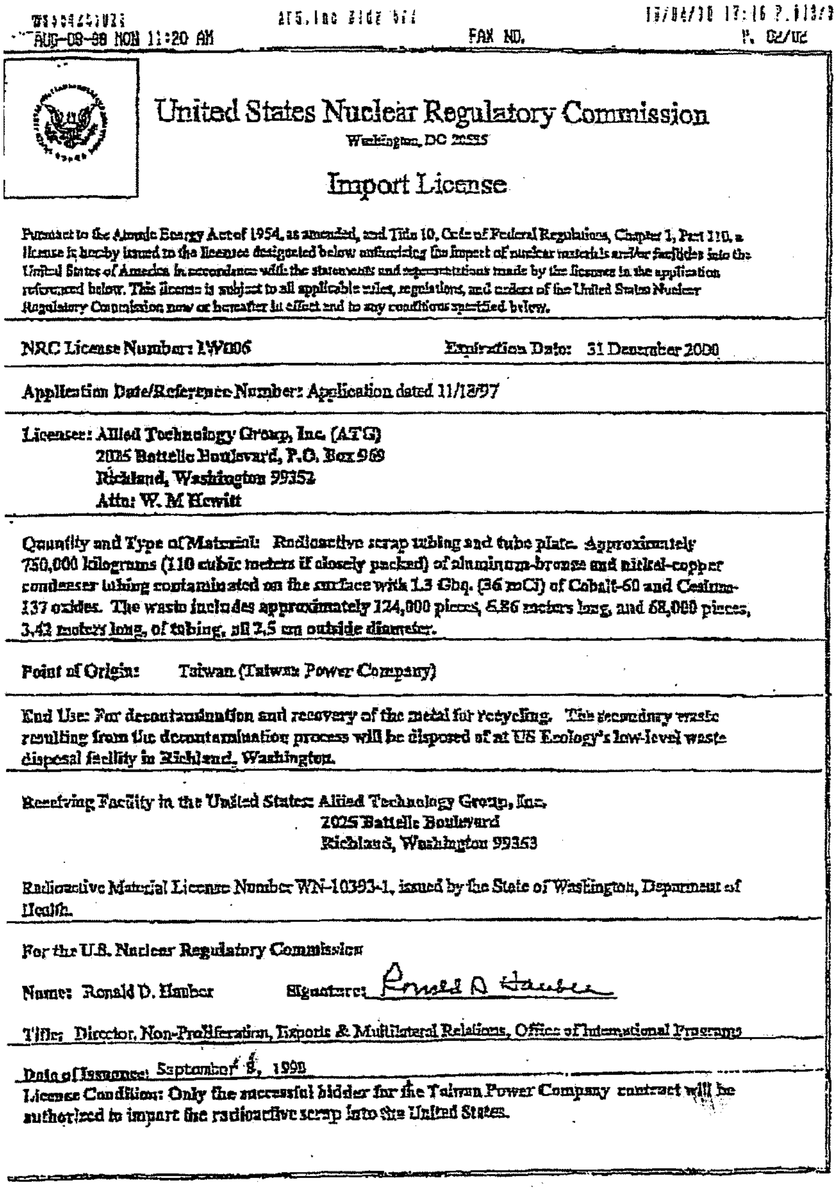
Sincerely,

DLFinerfrock
Dane L. Finerfrock, Director
Division of Radiation Control

Cc: Tye Rogers, Energy*Solutions*

168 North 1950 West • PO Box 144850 • Salt Lake City, UT 84114-4850 • phone (801) 536-4250 • fax (801) 533-4097
T.D.D. (801) 536-4414 • *www.deq.utah.gov*

Attachment 1



[illegible]

AUG-08-98 MON 11:20 AM FAX NO. P. 02/02

United States Nuclear Regulatory Commission

Washington, DC 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW006 **Expiration Date:** 31 December 2000

Application Date/Reference Number: Application dated 11/18/97

Licensee: Allied Technology Group, Inc. (ATG)
2025 Battelle Boulevard, P.O. Box 969
Richland, Washington 99352
Attn: W. M Hewitt

Quantity and Type of Material: Radioactive scrap tubing and tube plate. Approximately 750,000 kilograms (110 cubic meters if closely packed) of aluminum-bronze and nickel-copper condenser tubing contaminated on the surface with 1.3 Gbq. (36 mCi) of Cobalt-60 and Cesium-137 oxides. The waste includes approximately 124,000 pieces, 6.86 meters long, and 68,000 pieces, 3.42 meters long, of tubing, all 2.5 cm outside diameter.

Point of Origin: Taiwan (Taiwan Power Company)

End Use: For decontamination and recovery of the metal for recycling. The secondary waste resulting from the decontamination process will be disposed of at US Ecology's low-level waste disposal facility in Richland, Washington.

Receiving Facility in the United States: Allied Technology Group, Inc.
2025 Battelle Boulevard
Richland, Washington 99353

Radioactive Material License Number WN-10393-1, issued by the State of Washington, Department of Health.

For the U.S. Nuclear Regulatory Commission

Name: Ronald D. Hauber **Signature:** Ronald D Hauber

Title: Director, Non-Proliferation, Exports & Multilateral Relations, Office of International Programs

Date of Issuance: September 8, 1998

License Condition: Only the successful bidder for the Taiwan Power Company contract will be authorized to import the radioactive scrap into the United States.

From: Garner, Mike (ECY) [mailto:JAMG461@ECY.WA.GOV]
Sent: Thursday, November 15, 2007 2:42 PM
To: Tye Rogers
Cc: ccannon@perma-fix.com; brogers@envirocareutah.com; Goldstein, Larry (ECY); Elsen, Mike (DOH)
Subject: RE: ATG Legacy Waste

Tye: That portion of the Allied Technology Group legacy waste that is authorized for shipment to EnergySolutions by the Washington State Department of Health does not require compact authorization. Please read the attachment as it addresses the ATG legacy waste issue. Thanks for ensuring this waste meets all compact rules and requirements. Call me if you have questions - Mike

---

From: Tye Rogers [mailto:trogers@energysolutions.com]
Sent: Wednesday, November 14, 2007 1:25 PM
To: Garner, Mike (ECY)
Cc: brogers@envirocareutah.com; kkirkwood@envirocareutah.com; arafati@envirocareutah.com
Subject:

Mike,

We have been contacted by PeCos and they would like to start shipping the legacy waste to us and they have represented that they have all the neccessary regulatory approvals. The last time we talked, it appeared that they were close to obtaining approval. By our license, we are required to obtain approval from the compact, prior to receiving any shipment. Will you please reply to this email stating that we have your permission to receive this waste, if indeed they have regulatory approval? They would like to ship as soon as possible. Pls give me a call if you have any questions. I am traveling so please contact me on my cell: 801-560-3603.

Thanks

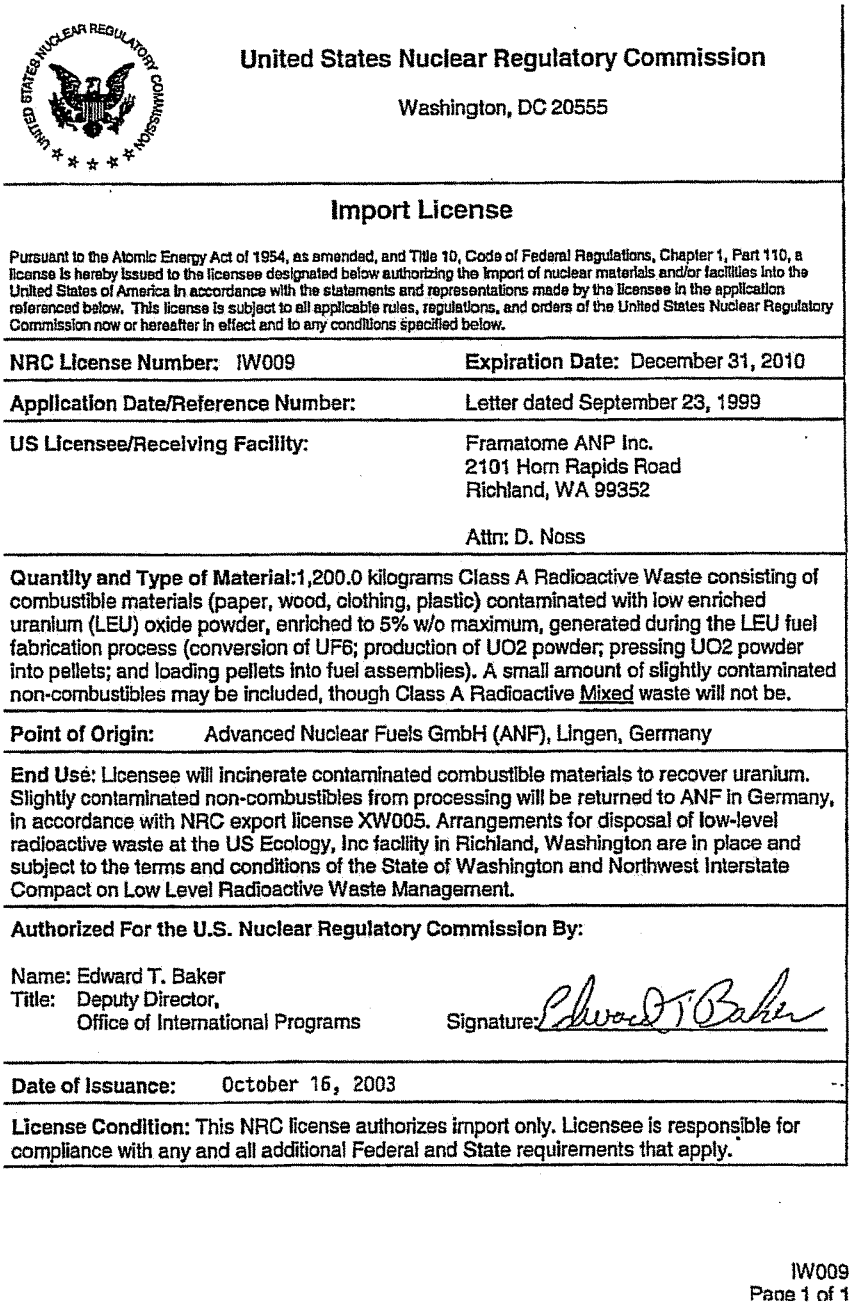
Tye

As reported at the September 25, 2007 meeting of the Northwest Compact Committee the Washington State Department of Health (Health) has resolved the Allied Technology Group (ATG) legacy waste issue at the Richland, Washington waste treatment and processing facility. This facility is now operated by Perma-Fix Northwest (PFNW). Approximately ten percent of the legacy waste will be disposed at the Richland, Washington commercial disposal facility. The other ninety percent is considered out-of-region low-level waste and is eligible for disposal at EnergySolutions, Clive facility.

Health provides regulatory oversight for low-level waste shipments out of the PFNW facility. Health will only authorize shipment of that portion of the legacy waste identified as having originated outside of the compact region for shipment to EnergySolutions. This waste may be shipped as PFNW/ATG legacy waste.

Both Health and PFNW will notify the Executive Director of the Northwest Compact once shipment of the out-of-region legacy waste is completed.

This authorization applies only to the ATG legacy waste. Future out-of-region low-level waste should be attributed to the generator and state in which it was generated. If you have questions please contact me at (360) 407-7102.



United States Nuclear Regulatory Commission

Washington, DC 20555

Import License

Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 110, a license is hereby issued to the licensee designated below authorizing the import of nuclear materials and/or facilities into the United States of America in accordance with the statements and representations made by the licensee in the application referenced below. This license is subject to all applicable rules, regulations, and orders of the United States Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

NRC License Number: IW009 **Expiration Date:** December 31, 2010

Application Date/Reference Number: Letter dated September 23, 1999

US Licensee/Receiving Facility:

Framatome ANP Inc.
2101 Horn Rapids Road
Richland, WA 99352

Attn: D. Noss

Quantity and Type of Material: 1,200.0 kilograms Class A Radioactive Waste consisting of combustible materials (paper, wood, clothing, plastic) contaminated with low enriched uranium (LEU) oxide powder, enriched to 5% w/o maximum, generated during the LEU fuel fabrication process (conversion of UF6; production of UO2 powder; pressing UO2 powder into pellets; and loading pellets into fuel assemblies). A small amount of slightly contaminated non-combustibles may be included, though Class A Radioactive Mixed waste will not be.

Point of Origin: Advanced Nuclear Fuels GmbH (ANF), Lingen, Germany

End Use: Licensee will incinerate contaminated combustible materials to recover uranium. Slightly contaminated non-combustibles from processing will be returned to ANF in Germany, in accordance with NRC export license XW005. Arrangements for disposal of low-level radioactive waste at the US Ecology, Inc facility in Richland, Washington are in place and subject to the terms and conditions of the State of Washington and Northwest Interstate Compact on Low Level Radioactive Waste Management.

Authorized For the U.S. Nuclear Regulatory Commission By:

Name: Edward T. Baker
Title: Deputy Director,
Office of International Programs

Signature: Edward T Baker

Date of Issuance: October 16, 2003

License Condition: This NRC license authorizes import only. Licensee is responsible for compliance with any and all additional Federal and State requirements that apply.

IW009
Page 1 of 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 29, 2000

Mr. Michael Garner
Department of Ecology
Nuclear Waste Program
State of Washington
P.O. Box 47600
Olympia, WA 98504-7600

Mr. William Sinclair, Director
Division of Radiation Control
State of Utah
P.O. Box 144850
Salt Lake City, UT 84114-4850

Gentlemen:

Enclosed is an application dated September 23, 1999 from Siemens Power Corporation (SPC) for a license to import Class A radioactive waste from Germany.

The material to be imported is from Advanced Nuclear Fuels GmbH (ANF) in Lingen, Germany, and consists of combustible materials contaminated with low enriched uranium. The waste is generated during low enriched nuclear fuel fabrication including conversion of UF6, production of UO2 powder, pressing of the powder into pellets, and loading of the pellets into fuel assemblies.

The imported material will be shipped directly from Europe by sea to U.S. East coast ports and ultimately by truck to SPC in Richland, Washington. Upon receipt, SPC will incinerate the material and the uranium in the ash will be recovered; the slightly contaminated non-combustibles sorted out during the incineration process will be returned to the originator in Germany. Residues from the filter process will be disposed of at either the Hanford low-level radioactive waste disposal site operated by U.S. Ecology in Richland, Washington or Envirocare in Clive, Utah in accordance with applicable site license conditions and waste acceptance criteria.

Before taking action on this application, we wish to consult with all affected States and compacts and ask for your comments regarding the proposed import of the subject low-level radioactive waste.

Sincerely,

Betty L. Wright for

Ronald D. Hauber, Deputy Director
Office of International Programs

Enclosure:
Import Lic. Appl. IW009 dtd 09/23/99

cc w/encl: J. Greeve, NMSS/DWM
P. Lohaus, OSP

Template OIP-002

DF03

~~RH~~
BW

Northwest Interstate Compact
On Low-Level Radioactive Waste Management
P.O. Box 47600. Olympia, Washington 98504-7600. (360) 407-7102. Mike Garner, Executive Director

cc: to J. Kennedy
NMSS

April 18, 2000

IW 009
11005149
additional information

Mr. Ronald D. Hauber, Deputy Director
Office of International Programs
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Hauber:

Thank you for your March 29, 2000 in which you request comments regarding a request by Siemens Power Corporation for a license to import Class A low-level radioactive waste from Germany. The Northwest Compact has no issue with the request made by Siemens Power Corporation however, I would like to take the opportunity to clarify a couple of points.

First, all low-level radioactive waste resulting from the vacuum filtration stage of the uranium recovery process at Siemen's Richland facility would be eligible for disposal at the commercial low-level radioactive waste disposal facility located near Richland, Washington and operated by US Ecology, Inc. However, in accordance with the "Second Amended Resolution and Order" adopted by the Northwest Compact Committee on November 9, 1998, such low-level radioactive waste could not be sent to the Envirocare of Utah, Inc. facility without first obtaining the approval of the Northwest Compact Committee (see enclosure).

Second, if the material resulting from the uranium recovery process was a low-level mixed waste it may be sent to the Envirocare of Utah, Inc. facility without the approval of the Northwest Compact Committee.

Should you have additional questions please contact me at 360/407-7102.

Sincerely,

Mike Garner

Mike Garner, Executive Director
Northwest Interstate Compact

Enclosure
cc: Northwest Compact Committee

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2000 MAY -1 AM 7:40

ML003709549

Northwest Interstate Compact
On Low-Level Radioactive Waste Management
P.O. Box 47600. Olympia, Washington 98504-7600. (360) 407-7102. Mike Garner, Executive Director

SECOND AMENDED RESOLUTION AND ORDER

Whereas, the Compact Committee continues to support the Low-Level Radioactive Waste Policy Amendments Act, Public Law 99-240;

Whereas, the State of Utah has licensed Envirocare of Utah, Inc. as a low-level radioactive waste disposal facility;

Whereas, the Envirocare of Utah, Inc. facility in Clive, Utah, serves an important national purpose in accepting certain types of low-level radioactive waste for treatment and disposal;

Whereas, allowing certain low-level radioactive waste access to the licensed Envirocare of Utah, Inc. facility should not be construed to diminish the Compact Committee's support for Public Law 99-240;

Whereas, since allowing access to the Envirocare of Utah, Inc. facility, as restricted by the radioactive materials license issued by the State of Utah, will not resolve continued uncertainties about national capacity for the disposal of low-level radioactive waste, the Compact Committee urges other compacts and unaffiliated states to provide disposal capacity for such waste;

Whereas, no facility located in any party state may accept low-level waste generated outside the region comprised of the party states except as may be agreed to under Articles IV and V of the Compact statute; and

Whereas, the Compact Committee has been asked by the State of Utah to allow access to Envirocare of Utah, Inc. for certain low-level radioactive wastes;

BE IT HEREBY RESOLVED AND ORDERED THAT:

1. Low-level radioactive mixed waste, as defined in federal and/or state law is allowed access to the Envirocare of Utah, Inc. facility in the Northwest Interstate Compact region.
2. Low-level radioactive waste (as defined in Public Law 99-240) as allowed under, and regulated by the terms of, the radioactive materials license of Envirocare of Utah, Inc. as determined by the State of Utah, is allowed access to the Envirocare of Utah, Inc. facility in the Northwest Interstate Compact region.

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ALASKA . HAWAII . IDAHO . MONTANA . OREGON . UTAH . WASHINGTON . WYOMING

3. While the Compact allows the above described wastes access to the licensed Envirocare of Utah. Inc. facility in the Northwest Interstate Compact region, in accordance with Article V of the Compact, Utah retains the right to specifically approve each disposal arrangement before the waste is allowed access to the licensed Envirocare of Utah, Inc. facility.

4. All federal and state environmental and other laws and regulations shall be complied with by the licensed Envirocare of Utah, Inc. facility accepting the above referenced media or waste for treatment, storage, or disposal. The Compact has no authority and assumes no responsibility for the licensing and operation of the Envirocare of Utah, Inc. facility.

5. It is the intent of the Committee that only those wastes approved by the compact of origin (including the Northwest Compact) be allowed. For states unaffiliated with a compact, state approval for export is required to the extent states can exercise such approval. This Resolution and Order shall constitute an arrangement under Article V of the Compact statute with any unaffiliated state or compact that approves waste for export to the Envirocare of Utah, Inc. facility.

6. The licensed Envirocare of Utah, Inc. facility accepting any of the above described low-level radioactive wastes shall provide monthly to the Compact Executive Director a record of all shipments to include generator name, state of generation, the kind of waste, waste form, total waste volume, and average concentration of each such shipment.

7. The Northwest Interstate Compact retains the right to modify or rescind this authorization at any time. The Compact Executive Director shall monitor progress of other compacts and states in siting low-level radioactive waste disposal facilities under Public Law 99-240. At three-year intervals, the Compact Committee shall evaluate such progress with regard to access to the Envirocare of Utah, Inc. facility.

As approved by the Northwest Interstate Compact on Low-Level Radioactive Waste Management, I execute this revised Resolution and Order on the 9TH day of November 1998.

Jeffy P. Breckel

Jeffrey P. Breckel, Chair
Northwest Interstate Compact on
Low-Level Radioactive Waste Management

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

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1999 SEP 29 PM 3:03

February 26, 1999

Mr. Loren J. Maas, Manager
Regulatory Compliance
Siemen's Power Coorporation
2101 Horn Rapids Road
Richland, WA 99352

Dear Mr. Maas:

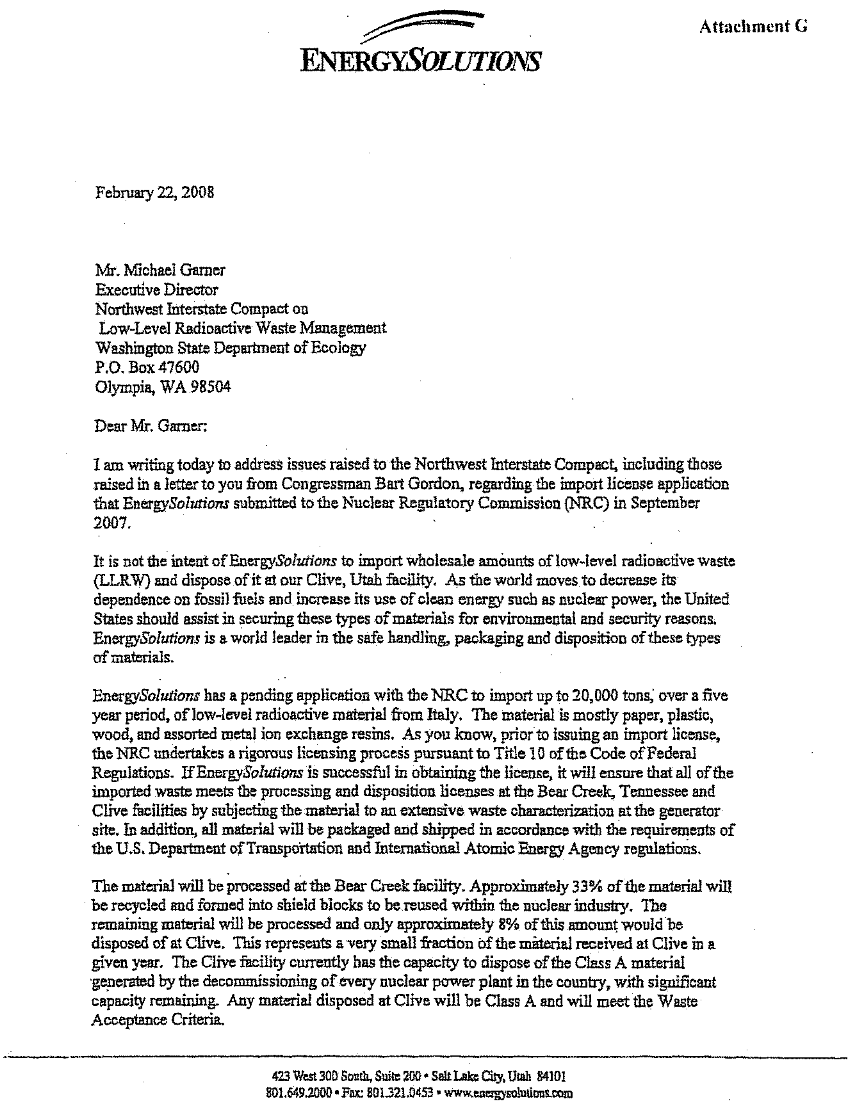
I have reviewed the materials that you provided to Mr. Mike Garner, Environmental Specialist, regarding Siemen's uranium recovery process. I concur with Mr. Garner's assessment that waste does not result until the vacuum filtration stage of the uranium recovery process. This stage separates the uranium solution, to be used for fuel fabrication, from the ash residue. The waste consists of ash residue and perlite filter media. Hence, the waste generated by the uranium recovery process for both Siemen's Lingen, Germany and Richland, Washington contaminated material would be attributed to Siemens' Richland facility. Therefore, these wastes would be eligible for disposal at US Ecology's disposal facility, provided they meet the waste acceptance criteria for the site. I want to emphasize that all non-incinerable items received from Siemen's Lingen facility are not eligible for disposal at the US Ecology facility.

The authorization provided above is valid for those materials and processes described within your proposal. I am providing a copy of this letter to Mr. Doug Mosich, Chair of the Northwest Interstate Compact, to ensure the compact is aware that the Washington State Department of Ecology will attribute this waste to Siemens' Richland facility. Should you have additional questions, please contact Mr. Garner at (360) 407-7102.

Sincerely,

Michael Wilson, Program Manager
Nuclear Waste Program

cc: Mr. Doug Mosich, Northwest Interstate Compact
Mr. Gary Robertson, Washington State Department of Health



Attachment G

ENERGYSOLUTIONS

February 22, 2008

Mr. Michael Garner
Executive Director
Northwest Interstate Compact on
Low-Level Radioactive Waste Management
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504

Dear Mr. Garner:

I am writing today to address issues raised to the Northwest Interstate Compact, including those raised in a letter to you from Congressman Bart Gordon, regarding the import license application that Energy*Solutions* submitted to the Nuclear Regulatory Commission (NRC) in September 2007.

It is not the intent of Energy*Solutions* to import wholesale amounts of low-level radioactive waste (LLRW) and dispose of it at our Clive, Utah facility. As the world moves to decrease its dependence on fossil fuels and increase its use of clean energy such as nuclear power, the United States should assist in securing these types of materials for environmental and security reasons. Energy*Solutions* is a world leader in the safe handling, packaging and disposition of these types of materials.

Energy*Solutions* has a pending application with the NRC to import up to 20,000 tons, over a five year period, of low-level radioactive material from Italy. The material is mostly paper, plastic, wood, and assorted metal ion exchange resins. As you know, prior to issuing an import license, the NRC undertakes a rigorous licensing process pursuant to Title 10 of the Code of Federal Regulations. If Energy*Solutions* is successful in obtaining the license, it will ensure that all of the imported waste meets the processing and disposition licenses at the Bear Creek, Tennessee and Clive facilities by subjecting the material to an extensive waste characterization at the generator site. In addition, all material will be packaged and shipped in accordance with the requirements of the U.S. Department of Transportation and International Atomic Energy Agency regulations.

The material will be processed at the Bear Creek facility. Approximately 33% of the material will be recycled and formed into shield blocks to be reused within the nuclear industry. The remaining material will be processed and only approximately 8% of this amount would be disposed of at Clive. This represents a very small fraction of the material received at Clive in a given year. The Clive facility currently has the capacity to dispose of the Class A material generated by the decommissioning of every nuclear power plant in the country, with significant capacity remaining. Any material disposed at Clive will be Class A and will meet the Waste Acceptance Criteria.

423 West 300 South, Suite 200 • Salt Lake City, Utah 84101
801.649.2000 • Fax: 801.321.0453 • www.energysolutions.com

ENERGYSOLUTIONS

It has been reported that the pending application is 25 times greater than any other application received by the NRC. This is not accurate. In 2006, the NRC granted a license to import up to 6,000 tons of the same type of material and in 2007 the NRC granted a license to import up to 5,500 tons of similar material. It has been asserted that if the NRC grants our license it will represent an unprecedented reversal in the country's approach to the disposal of LLRW. This is not accurate. The NRC has granted similar licenses in the past consistent with the U.S. laws and regulations. Some have also asserted that no European country has disposal options for LLRW. This is not accurate. Currently there are 7 LLWR repositories in Europe.

We understand that Clive plays a vital role in the disposal of LLRW in the United States. We will always maintain sufficient capacity at Clive to meet the domestic needs of our country. We assure you that we will not become the disposal site for the world.

Sincerely,

R Steve Creamer
Chairman and CEO

Cc: The Honorable Dave Freudenthal
The Honorable Linda Lingle
The Honorable Christine Gregoire
The Honorable Ted Kulongoski
The Honorable C.L. "Butch" Otter
The Honorable Sarah Palin
The Honorable Brian Schweitzer
The Honorable Jon Huntsman, Jr.

ENERGYSOLUTIONS

February 21, 2008

Kent J. Bradford, Chairman
Utah Radiation Control Board
Westinghouse Electric Company Nuclear Fuel
10000 West 900 South
Ogden, Utah 84404-09760

Dear Mr. Bradford:

Thank you for your dedication and hard work on the Radiation Control Board. The Board performs a vital function for our great State of Utah. I understand that at the last Board meeting several members expressed concerns over our pending import license at the Nuclear Regulatory Commission (NRC). I would like to address this issue.

Energy*Solutions* has no plans to open the gates of Clive for wholesale disposal of the world's nuclear waste. Our proposal to import material from Italy and process it at our Bear Creek facility in Tennessee and dispose of a small fraction of it at Clive will not jeopardize Clive's capacity. Of the material to be imported, approximately 33% would be recycled and formed into metal shield blocks to be reused within the nuclear industry. The remaining material would be processed at Bear Creek and around 8% of this amount would be Class A material disposed of at Clive. This represents less than 1% on average on an annual basis of the volume disposed of at Clive.

We agree with you that Clive is a national asset and we understand our responsibility in protecting this asset. It is essential to maintain Clive's capacity principally for domestic needs and we intend to do that. The Clive facility has sufficient capacity to ensure that these needs are met, today and in the future.

We also recognize that energy security is essential to our nation's national security. We must reduce our dependence on foreign oil, diversify our energy supply and increase energy efficiency and conservation. Nuclear power is a vital component to achieving this important national objective.

As the Nation and the world move to increasing the use of this clean energy source we must recognize that we are one world. The United States should stand ready to provide technical solutions to those countries that are in need. This does not mean that

423 West 300 South, Suite 200 • Salt Lake City, Utah 84101
801.649.2000 • Fax: 801.321.0453 • www.energysolutions.com

Energy*Solutions*, or any other company in the United States, should be responsible for disposing of the world's nuclear waste.

We also understand the importance of protecting our environment, our local community, and our State. You have my commitment that Energy*Solutions* will consistently and continually discharge this responsibility.

Very truly yours,

R Steve Creamer
Chairman and CEO

Attachment H

ENERGY*SOLUTIONS*

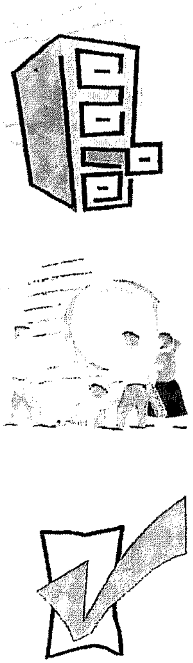
Safety, Quality and Compliance

- 100% commitment to Safety and Compliance
  - Achieved OSHA Voluntary Protection Programs (VPP) Star Site (MSC in place, BCO applied for)
- Energy*Solutions* recently recognized by OSHA for safety excellence
- Transportation
  - Approximately 51,000 shipments (in the US) without incident with more than 8 million miles per year
  - Hold DOT highest rating of Satisfactory
  - Numerous Quality Awards
    - National Safety Council
    - American Trucking Association
    - Chemical Waste Transport Institute
    - Interstate Carriers Conference

STAR
WORKSITE
VPP
Partners in Safety and Health
OSHA – Management – Labor

Energy*Solutions* is Highly Regulated and Audited

- Tennessee Department of Environment and Conservation (TDEC) – a minimum of once a year
- TDEC Division of Solid Waste – every year
- Tennessee Air Pollution Control – every year
- Tennessee Publicly Owned Treatment Works (POTW) – every 6 months
- Environmental Protection Agency (EPA) – annually
- Nuclear Regulatory Commission (NRC) – at their pleasure
- Department of Transportation (DOT) – every 5 years
- Nuclear Procurement Issues Committee (NUPIC) – every 2 years
- DOE Consolidated Audit Program (DOECAP) –every year
- DOE Transportation Audit – every 3 years
- American Nuclear Insurers (ANI) – every year
- CHWMEG (non-profit organization Globally Promoting Responsible Waste Stewardship)– every 3 years
- Annual evaluations from many of our customers



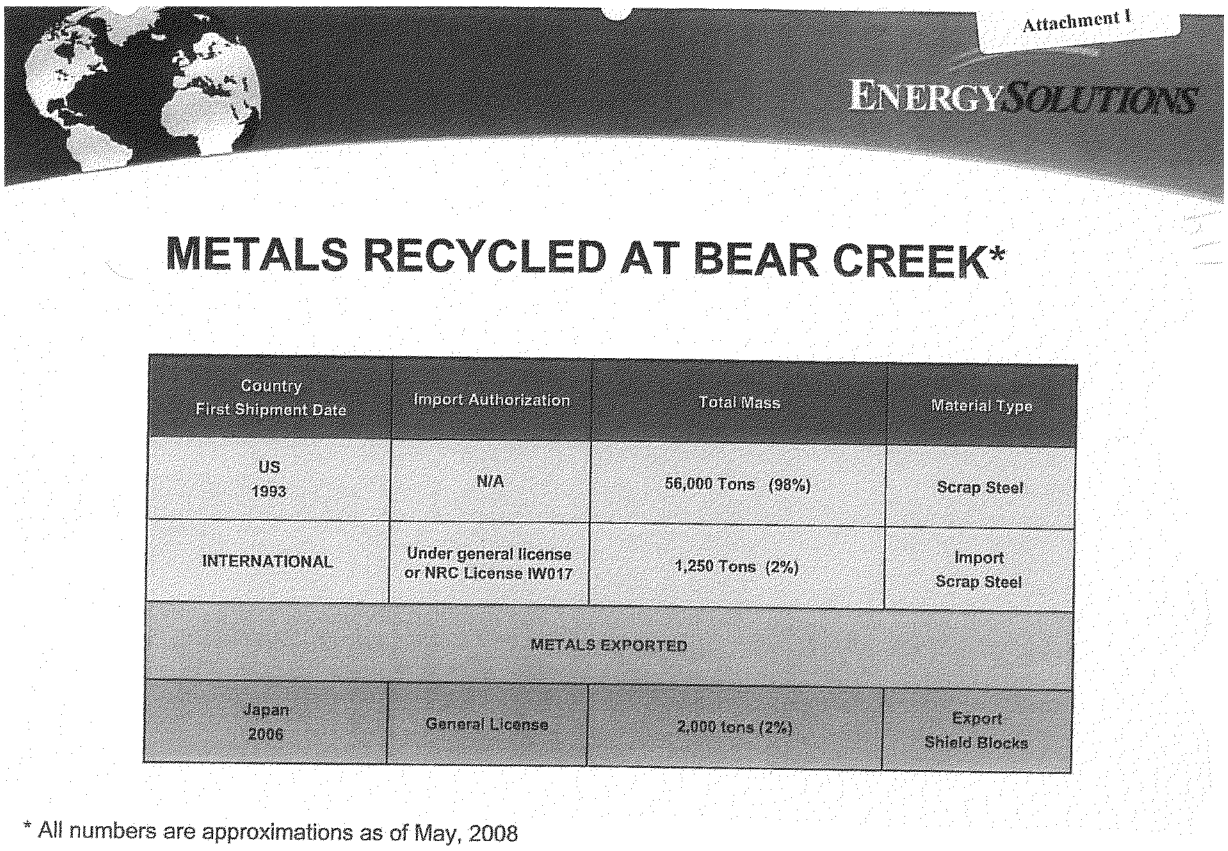
Responsible Corporate Citizen

ENERGYSOLUTIONS

- Community support is very important to EnergySolutions and our employees. The cornerstone of that support comes from our Foundation and its scholarship program.
  - Encourage students to seek degrees in math, science or engineering.
  - Last year 165 scholarship were awarded.
  - The Foundation also donates money to cleaning up the environment.
- Examples of Community Involvement Across the Country:
  - Guadalupe School
  - Chambers of Commerce/Rotary
  - Central Utah Science & Engineering Fair
  - Utah Science Teachers Association
  - Volunteers of America board representation
  - American Lung Association board representation
  - Michael Dunn Center Board representation (handicapped adult school)
  - Oak Ridge Secret City Festival
  - Oak Ridge Children's Museum International Festival
  - Toys for Tots
  - Hanford Engineers Week
  - Tri-City Cancer Center for Women
  - Aiken Academic Booster Club
  - Augusta Arts Council
  - Barnwell County Council

Habitat for Humanity

EnergySolutions FOUNDATION



Attachment I

ENERGYSOLUTIONS

METALS RECYCLED AT BEAR CREEK*

Country First Shipment Date	Import Authorization	Total Mass	Material Type
US 1993	N/A	56,000 Tons (98%)	Scrap Steel
INTERNATIONAL	Under general license or NRC License IW017	1,250 Tons (2%)	Import Scrap Steel
METALS EXPORTED			
Japan 2006	General License	2,000 tons (2%)	Export Shield Blocks

* All numbers are approximations as of May, 2008

Mr. BOUCHER. Thank you very much, Mr. Creamer.

Mr. Aloise.

STATEMENT OF GENE ALOISE, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. ALOISE. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I am pleased to be here today to discuss our work on the management of low-level radioactive waste, a byproduct of nuclear power generation, industrial, medical, and other uses of radioisotopes. Low-level radioactive waste ranges from rags, paper, and clothing that have been exposed to radioactivity to building debris and contaminated soil. Management of this waste continues to be a concern despite the enactment of the Low-Level Radioactive Waste Policy Act almost 30 years ago. My remarks today are based on two of our issued reports including a June 2004 report that examined disposal availability in the United States for three of the four classes of low-level radioactive waste, Class A, B, and C waste, and a March 2007 report that examined approaches used by foreign countries to manage their low-level radioactive waste.

In June 2004, we noted that disposal capacity for low-level radioactive waste was generally adequate in the short term, but that pending constraints on Class B and C waste were problematic. As discussed earlier, Barnwell will prohibit waste generators in 36 States from accessing its facility by the end of June of this year. Barnwell currently accepts 99 percent of the Nation's Class B and C waste. If there are no new disposal options for this waste, users can continue to minimize waste generation, process waste in safer forms and store waste on site. We also reported that the Clive, Utah, disposal facility, which accepts 99 percent of the Nation's less hazardous Class A waste, could take this waste for 20 years. In updating our work for this hearing, we found that a two-thirds drop in disposal volume since 2005 as a result of the completion of several large DOE cleanup projects may extend the capacity for an additional 13 years, for a total remaining capacity of 33 years. Mr. Chairman, I want to point out that this additional capacity figure is based on discussions and documentation we obtained from a DOE official and the disposal operator and is based on relatively low disposal rates for a number of years.

Importantly, our analysis of disposal availability for Class A, B, and C waste was based on the generation of such waste only in the United States. We did not consider the impact on domestic capacity of importing foreign countries' low-level radioactive waste. Regarding other countries' management of low-level radioactive waste, 10 of the 18 countries we surveyed have disposal options for Class A, B and most of the C waste and six other countries have plans to build such facilities. Only Italy reported that it had no disposal or central storage facilities for low-level radioactive waste. However, Italy is one of the countries that indicated to us that it was planning to develop a disposal site for this waste, primarily for the decommissioning of its four nuclear plants and other nuclear facilities. The site was expected to be operational in 2010 but resistance to its location from local governments in Italy has delayed its opening.

Our March 2007 report also identified a number of approaches used to manage low-level radioactive waste in other countries that provide lessons to improve the management of U.S. radioactive waste. However, NRC and DOE have considered these approaches and are satisfied with the current management of low-level radioactive waste.

Mr. Chairman, that concludes my remarks. We would be happy to respond to any questions you or members of the subcommittee may have.

[The prepared statement of Mr. Aloise follows:]

United States Government Accountability Office

GAO

Testimony
Before the Subcommittee on Energy and Air Quality, Committee on Energy and Commerce, House of Representatives

For Release on Delivery
Expected at 10:00 a.m. EDT
Tuesday, May 20, 2008

LOW-LEVEL RADIOACTIVE WASTE

Status of Disposal Availability in the United States and Other Countries

Statement of Gene Aloise, Director
Natural Resources and Environment

GAO
Accountability * Integrity * Reliability

GAO-08-813T

GAO
Accountability·Integrity·Reliability

Highlights

Highlights of GAO-08-813T, testimony before the Subcommittee on Energy and Air Quality, Committee on Energy and Commerce, House of Representatives

May 2008

LOW-LEVEL RADIOACTIVE WASTE

Status of Disposal Availability in the United States and Other Countries

Why GAO Did This Study

Disposal of radioactive material continues to be highly controversial. To address part of the disposal problem, in 1980, Congress made the states responsible for disposing of most low-level radioactive waste (LLRW), and allowed them to form regional compacts and to restrict access to disposal facilities from noncompact states. LLRW is an inevitable byproduct of nuclear power generation and includes debris and contaminated soils from the decommissioning and cleanup of nuclear facilities, as well as metal and other material exposed to radioactivity. The Nuclear Regulatory Commission (NRC) ranks LLRW according to hazard exposure—class A, B, C, and greater-than-class C (GTCC) waste. The states are responsible for the first three waste classes, and the Department of Energy (DOE) is responsible for GTCC. Three facilities dispose of the nation's commercial and some DOE LLRW—in Utah, South Carolina, and Washington State.

The testimony addresses (1) LLRW management in the United States and (2) LLRW management in other countries. It is substantially based on two GAO reports: a June 2004 report (GAO-04-604) and a March 2007, report (GAO-07-221) that examined these issues. To prepare this testimony, GAO relied on data from the two reports and updated information on current LLRW disposal volumes, facility capacity, and accessibility.

To view the full product, including the scope and methodology, click on GAO-08-813T. For more information, contact Gene Aloise at (202) 512-3841 or aloisee@gao.gov.

What GAO Found

As GAO reported in 2004, existing disposal facilities had adequate capacity for most LLRW and were accessible to waste generators (hereafter referred to as disposal availability) in the short term, but constraints on the disposal of certain types of LLRW warranted concern. Specifically, South Carolina had decided to restrict access to its disposal facility—which was accepting about 99 percent of the class B and C wastes generated nationwide—to only waste generators in the three states of its compact. If there is no other disposal option for class B and C wastes after 2008, we found that licensed users of radioactive materials can continue to minimize waste generation, process waste into safer forms, and store waste pending the development of additional disposal options. While NRC prefers that LLRW be disposed of, it allows on-site storage as long as the waste remains safe and secure. In contrast, disposal availability for domestic class A waste is not a problem in the short or longer term. In 2004, GAO reported that the Utah disposal facility—which was accepting about 99 percent of this waste generated nationwide—could accept such waste for 20 years or more under its current license based on anticipated class A waste volumes. Since 2005, the volume of class A waste disposed of has declined by two-thirds primarily because DOE completed several large cleanup projects, extending the capacity of the Utah facility for an additional 13 years, for a total of 33 years of remaining disposal capacity. However, the June 2004 analysis, and our updated analysis, were based on the generation of LLRW only in the United States and did not consider the impact on domestic disposal capacity of importing foreign countries' LLRW.

Ten of the 18 countries surveyed for GAO's March 2007 report have disposal options for class A, B and most of C wastes, and 6 other countries have plans to build disposal facilities for this LLRW. Only 3 countries indicated that they have a disposal option for some class C and GTCC wastes; however, almost all countries that do not provide disposal for LLRW have centralized storage facilities for this waste. Only Italy reported that it had no disposal or central storage facilities for its LLRW, although it plans to develop a disposal site for this waste that will include waste from its decommissioned nuclear power plants and from other nuclear processing facilities. Italy initially expected this disposal site to be operational by 2010, but local governments' resistance to the location for a disposal site has delayed this date. The March 2007 report also identified a number of LLRW management approaches used in other countries that may provide lessons to improve the management of U.S. radioactive waste. These approaches include the use of comprehensive national radioactive waste inventory databases and the development of a national radioactive waste management plan. Such a plan would specify a single entity responsible for coordinating radioactive waste management and include strategies to address all types of radioactive waste. GAO had recommended that NRC and DOE evaluate and report to the Congress on the usefulness of these approaches. While the agencies have considered these approaches, they expressed particular concerns about the resources needed to implement some of them.

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss our past work on the management of low-level radioactive waste (LLRW) as the Subcommittee considers H.R. 5632, which would prohibit the importation of certain LLRW into the United States. LLRW is an inevitable byproduct of nuclear power generation and of government, industrial, academic, and medical uses of radioisotopes. It includes items such as rags, paper, liquid, glass, metal components, resins, filters, and protective clothing that have been exposed to radioactivity or have been contaminated with radioactive material. LLRW also includes debris, rubble, and contaminated soils from the decommissioning and cleanup of nuclear facilities. Almost 30 years ago federal legislation addressed the need to dispose of LLRW, but management of LLRW continues to be a concern. Under the LLRW Policy Act of 1980, as amended (the act), each state is responsible for providing for the disposal of LLRW generated within the state, either by itself or in cooperation with other states. States are not responsible for waste produced by the Department of Energy (DOE) or the nuclear propulsion component of the U.S. Navy. The aim of the act was to provide for the safe and effective management of LLRW disposal capacity on a regional basis. As an incentive for states to manage waste on a regional basis, the Congress consented to the formation of interstate agreements, known as compacts, and granted compact member states the authority to exclude LLRW from other compacts or unaffiliated states.[1]

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[1] There are 10 compacts: the Appalachian, Atlantic, Central, Central Midwest, Northwest, Midwest, Rocky Mountain, Southeast, Southwestern, and Texas Compacts. Together, these 10 compacts encompass 43 states. Generators of LLRW located in a compact or in unaffiliated states that do not have their own disposal facility can contract with a disposal facility in another compact if the other compact allows them to do so.

The Nuclear Regulatory Commission (NRC) is responsible for licensing LLRW disposal sites and has divided the wastes covered by the act into categories of increasing levels of hazard exposure, beginning with class A—the least hazardous category—followed by class B and class C.[2] There is also a fourth category, known as greater-than-class-C (GTCC) waste, which DOE is responsible for disposing of. NRC has relinquished to 34 states—called "Agreement States"—portions of its authority to license and regulate the use and disposal of radioactive materials. Although NRC has not licensed any disposal facilities, the Agreement States have licensed three commercial LLRW disposal facilities: one in Clive, Utah, operated by Energy*Solutions*, accepts almost all of the nation's class A waste; one in Barnwell, South Carolina, also operated by Energy*Solutions*, accepts almost all of the nation's class B and class C waste; and one in Richland, Washington, operated by US Ecology, accepts class A, B, and C wastes from the 11 states of the Rocky Mountain and Northwest LLRW compacts. Currently, there is no disposal facility for GTCC waste, although DOE is studying the feasibility of various disposal options.

Disposal of radioactive material continues to be highly controversial. We found that the impetus to develop new disposal facilities has been dampened by many factors, including decreases in disposal volumes, existing disposal availability, rising costs of developing a new facility, and public and political resistance in states designated to host these facilities. The United States is a large generator of LLRW because it has 104 nuclear power reactors and thousands of radioactive material licensees. NRC has reported that future disposal availability and the costs of disposal under the current system remain highly uncertain and waste generators need predictability and stability in the national disposal system. Disposal availability for LLRW is also a concern in some foreign countries. Specifically, 29 other countries generate electricity from 331 nuclear power reactors, and many others generate LLRW from academic, industrial, and medical uses of radioactive material. Like the United States, these countries face LLRW disposal challenges.

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[2] The classification of waste is determined by the type of radionuclide (e.g., americium-241) and the

Our testimony today is substantially based on two reports: (1) our June 2004 report, which examined the adequacy of LLRW disposal availability for class A, B, and C wastes,[3] and (2) our March 2007 report, which examined the approaches foreign countries use to manage their LLRW.[4]

To prepare this testimony, we relied on data from our two reports and updated information on domestic LLRW disposal availability and volumes. Estimates of disposal volumes and capacity came from the operators that we interviewed for our June 2004 report. We updated the information from an LLRW database through discussions with a cognizant DOE official. Information on disposal availability for foreign countries came directly from survey information that we used in preparing the 2007 report. Information on Italy came from survey data and supplemental reports. We conducted the work in the prior reports we used in preparing this testimony and the work we conducted in updating LLRW disposal information in accordance with generally accepted government auditing standards.

In summary, we found the following:

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concentration of radioactivity (often measured in curies per gram).

[3] GAO, *Low-Level Radioactive Waste: Disposal Availability Adequate in the Short Term, but Oversight Needed to Identify Any Future Shortfalls,* GAO-04-604 (Washington, D.C.: June 9, 2004).

As we reported in June 2004, existing disposal facilities had adequate capacity for most LLRW and were accessible to waste generators (hereby referred to as disposal availability) in the short term, but constraints on the disposal of class B and C wastes warranted concern. Specifically, South Carolina had decided to close the Barnwell disposal facility to noncompact states by mid-2008. When this restriction begins on June 30, 2008, Barnwell, which currently accepts about 99 percent of the nation's commercial class B and C wastes, will be available only to waste generated in three states. If after this date there are no new disposal options for class B and C wastes, licensed users of radioactive materials can continue to minimize waste generation, process waste into safer forms, and store waste pending the development of additional disposal options. While NRC prefers the disposal of LLRW, it allows on-site storage as long as the waste remains safe and secure. In contrast, disposal availability for domestic class A waste is not a problem in the short or longer term. We reported in June 2004 that the Clive, Utah, disposal facility, was accepting about 99 percent of the nation's class A waste and could accept such waste for 20 years or more under its current license based on then-projected class A disposal volumes. Since 2005, the volume of class A waste disposed of has declined by two-thirds primarily because DOE has completed several large cleanup projects. This has extended by 13 years the time when this facility will be expected to reach its capacity. It is important to note, however, that our June 2004 analysis and our updated analysis of the availability of disposal capacity for class A, B, and C wastes was based only on the generation of this waste in the United States and did not consider the impact on domestic disposal capacity of importing foreign countries' LLRW.

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[4] GAO, *Low-Level Radioactive Waste Management: Approaches Used by Foreign Countries May Provide Useful Lessons for Managing U.S. Radioactive Waste*, GAO-07-221 (Washington, D.C.: March 21, 2007).

Ten of the 18 countries we surveyed for our March 2007 report have disposal options for LLRW similar to U.S. classes A, B and most of C wastes, and 6 other countries indicated that they have plans to build such facilities. Only 3 countries indicated that they have a disposal option for LLRW similar to some class C waste and all GTCC waste. However, almost all of the countries that do not provide disposal for LLRW provide centralized storage facilities for this waste. Only Italy reported that it had no disposal or central storage facilities for its LLRW, although Italy indicated in our survey that it had plans to develop a disposal site for radioactive waste from its decommissioned nuclear power plants and from other nuclear processing facilities. Italy initially expected this disposal site to be operational by 2010, but local governments' resistance to the location of this disposal site has delayed this date. Our March 2007 report also identified a number of LLRW management approaches used in other countries that may provide lessons to improve the management of U.S. radioactive waste. These approaches include the use of comprehensive national radioactive waste inventory databases and the development of a national radioactive waste management plan. Such a plan would specify a single entity responsible for coordinating radioactive waste management and include strategies to address all types of radioactive waste. We recommended that NRC and DOE evaluate and report to the Congress on the usefulness of these approaches. While the agencies considered these approaches, they expressed particular concerns about the significant resources required to develop and implement a national inventory and management plan for LLRW.

Background

The disposal of LLRW is the end of the radioactive material lifecycle that spans production, use, processing, interim storage, and disposal. On the commercial side, the nuclear utility industry generates the bulk of this LLRW through the normal operation and maintenance of nuclear power plants, and through the decommissioning of these plants. Other LLRW is generated from medical, industrial, agricultural, and research applications. Common uses of radioactive material are in radiotherapy, radiography, smoke detectors, irradiation and sterilization of food and materials, measuring devices, and illumination of emergency exit signs. In the course of working with these radioactive materials, other material, such as protective clothing and gloves, pipes, filters, and concrete, that come in contact with them will become contaminated and therefore need to be disposed of as LLRW. DOE also disposes of radioactive waste at its own sites and at commercial disposal facilities.

In the 1960s, the Atomic Energy Commission, a predecessor agency to DOE, began to encourage the development of commercial LLRW disposal facilities to accommodate the increased volume of commercial waste that was being generated. Six such disposal facilities were licensed, two of which, the Richland facility, licensed in 1965, and the Barnwell facility, licensed in 1971, remain today. Each of these facilities is located within the boundaries of or adjacent to a much larger site owned by DOE. The third facility, in Clive, Utah, operated by Energy*Solutions* (formerly known as Envirocare), was originally licensed by the state of Utah in 1988 to only accept naturally occurring radioactive waste. In 1991, Utah amended the facility's license to permit the disposal of some LLRW, and the Northwest Compact agreed to allow the facility to accept these wastes from noncompact states. By 2001, the facility was allowed to accept all types of class A waste.

The United States Currently Has Available Disposal Capacity for Most Domestically Produced LLRW

At this time, sufficient available disposal capacity exists for almost all LLRW. However, fast-approaching constraints on the availability of disposal capacity for classes B and C wastes could adversely affect disposal of this waste by generators in most states. Specifically, beginning in June 30, 2008, waste generators in 36 states will be precluded from using the Barnwell disposal facility for their class B and class C LLRW. That facility currently accepts about 99 percent of the nation's class B and C commercial LLRW. Although there is more than sufficient capacity to serve waste generators from the 3 compact states that use Barnwell and the 11 compact states that use Richland until at least 2050, the remaining 36 states will have no disposal options for their class B and class C LLRW.

Although waste generators in these 36 states will no longer have access to Barnwell, they can continue to minimize waste generation, process waste into safer forms, and store waste pending the development of additional disposal options. While NRC prefers the disposal of LLRW, it allows on-site storage as long as the waste remains safe and secure. Since September 11, 2001, both the public's concern with, and its perception of, risk associated with radioactive release, including that from stored LLRW, have increased. However, should an immediate and serious threat come from any specific location of stored waste, NRC has the authority under the act to override any compact restrictions and allow shipment of the waste to a regional or other nonfederal disposal facility under narrowly defined conditions. Waste minimization techniques and storage can alleviate the need for disposal capacity, but they can be costly. For example, in June 2004 we reported that one university built a $12 million combined hazardous and radioactive waste management facility. Two-thirds of this facility is devoted to the processing and temporary storage of class A waste.

Additional disposal capacity for the typical 20,000 to 25,000 cubic feet of class B and class C LLRW disposed of annually at Barnwell may become available with the opening of a new disposal facility in Texas. This facility is expected to receive a draft license by mid-June 2008 and appears to be on schedule to begin operations in 2010. Although the facility may accept some DOE cleanup waste, there is presently no indication that it will be made available to all waste generators beyond the two states that are members of the Texas Compact (Texas and Vermont).

In contrast, available disposal capacity for the nation's class A waste does not appear to be a problem in either the short or long term. Our June 2004 report noted that Energy*Solutions*' Clive facility had sufficient disposal capacity, based upon then-projected disposal volumes, to accept class A waste for at least 20 years under its current license. This facility was accepting about 99 percent of the nation's class A waste. Since our report was issued, domestic class A waste has declined from about 15.5 million cubic feet in 2005 to about 5 million cubic feet in 2007. This decline is primarily attributed to DOE's completion of several cleanup projects. DOE waste constituted about 50 percent of the total waste accepted by Energy*Solutions* in 2007. This reduction in projected class A disposal volumes will extend the amount of time the Clive facility can accept class A waste before exhausting its capacity. According to the disposal operator, capacity for this facility has been extended another 13 years, to 33 years of capacity.

It is important to note, however, that our June 2004 analysis of available LLRW disposal capacity considered only domestically produced LLRW. We did not consider the impact of imported LLRW on available class A, B, and C waste disposal capacity at Clive, Barnwell, and Richland. Although disposal capacity at the time of our June 2004 report appeared adequate using then-projected waste disposal volumes, the impact of adding additional waste from overseas waste generators is unclear.

Most Foreign Countries Either Have Available LLRW Disposal Capacity or Plan to Develop It

While none of the foreign countries we surveyed for our March 2007 report indicated that they had disposal options for all of their LLRW, almost all either had disposal capacity for their lower-activity LLRW or central storage facilities for their higher-activity LLRW, pending the availability of disposal capacity.[5] Specifically, we surveyed 18 foreign countries that previously had or currently have operating nuclear power plants or research reactors. Ten of the 18 countries reported having available disposal capacity for their lower-activity LLRW and 6 other countries have plans to build such facilities. Only 3 countries indicated that they have a disposal option for some higher-activity LLRW. Many countries that lack disposal capacity for LLRW provide centralized storage facilities to relieve waste generators of the need to store LLRW on-site. Specifically, 7 of the 8 countries without disposal facilities for lower-activity LLRW had centralized storage facilities. Eleven of the 15 countries without disposal facilities for at least some higher-activity LLRW provide central storage facilities for this waste.

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[5] In general, U.S. class A, B, and most of class C waste falls into the international category of short-lived low- and intermediate-level radioactive waste (lower-activity LLRW), and the remaining 25 percent of class C waste and all GTCC waste falls into the long-lived low- and intermediate-level radioactive waste category (higher-activity LLRW).

Of the 18 countries we surveyed, only Italy indicated that it lacked disposal availability for both lower- and higher-activity LLRW and central storage facilities for this waste. As reported by Italy to the international Nuclear Energy Agency, in 1999, the government began to develop a strategy for managing the liabilities resulting from the country's past nuclear activities. The strategy established a new national company to shut down all of Italy's nuclear power plants and to promptly decommission them. It also created a national agency that would establish and operate a disposal site for radioactive waste. A subsequent government decree in 2001 prompted an acceleration of the process to select a disposal site, with the site to begin operations in 2010. However, the Italian government has more recently reported it has encountered substantial difficulties in locating a site for a disposal facility because local governments have rejected the potential sites. In total, Italy will have an estimated 1.1 million cubic feet of lower-activity LLRW that will result from decommissioning its nuclear facilities in addition to the 829,000 cubic feet of this waste already in storage.

Our March 2007 report identified several management approaches used in foreign countries that, if adopted in the United States, could improve the management of radioactive waste. These approaches included, among other things,

- using a comprehensive national radioactive waste inventory of all types of radioactive waste by volume, location, and waste generator;

- providing disposal options for all types of LLRW or providing central storage options for higher-radioactivity LLRW if disposal options are unavailable; and
- developing financial assurance requirements for all waste generators to reduce government disposition costs.

We also identified another management approach used in most countries—national radioactive waste management plans—that also might provide lessons for managing U.S. radioactive waste. Currently, the United States does not have a national radioactive waste management plan and does not have a single federal agency or other organization responsible for coordinating LLRW stakeholder groups to develop such a plan. Such a plan for the United States could integrate the various radioactive waste management programs at the federal and state levels into a single source document.

Our March 2007 report recommended that NRC and DOE evaluate and report to the Congress on the usefulness of adopting the LLRW management approaches used in foreign countries and developing a U.S. radioactive waste management plan. Although both agencies generally agreed with our recommendations, NRC, on behalf of itself and DOE, subsequently rejected two of the key approaches. Specifically, NRC believes that the development of a comprehensive national radioactive waste inventory and a national waste management plan would be of limited use in the United States. In a March 2008 letter to GAO on the actions NRC has taken in response to our recommendations, NRC stated that the approach used in the United States is fundamentally different from other countries. In particular, NRC argued that, because responsibility for LLRW disposal is placed with the states, the federal government's role in developing options for managing and/or disposing of LLRW is limited. NRC also expressed concern about the usefulness and significant resources required to develop and implement a national inventory and management plan for LLRW.

We continue to believe comprehensive national radioactive waste inventory and a national radioactive waste management plan would be useful. The inventory would allow LLRW stakeholders to forecast waste volumes and to plan for future disposal capacity requirements. Moreover, the national plan could assist those interested in radioactive waste management to identify waste quantities and locations, plan for future storage and disposal development, identify research and development opportunities, and assess the need for regulatory or legislative actions. For example, there are no national contingency plans, other than allowing LLRW storage at waste generator sites, to address the impending closure of the Barnwell facility to class B and class C wastes from noncompact states. The availability of a national plan and periodic reporting on waste conditions might also provide the Congress and the public with a more accessible means for monitoring the management of radioactive waste and provide a mechanism to build greater public trust in the management of these wastes in the United States.

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Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or Members of the Committee may have at this time.

GAO Contact and Staff Acknowledgements

Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony. For further information about this testimony, please contact Gene Aloise at (202) 512-3841 or aloisee@gao.gov. Major contributors to this statement were Daniel Feehan (Assistant Director), Thomas Laetz, Lesley Rinner, and Carol Shulman.

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Mr. BOUCHER. Thank you very much, Mr. Aloise, Mr. Creamer.

Mr. Creamer, I have several questions of you. Has your company imported low-level waste from abroad previously, and if so, could you identify the disposal sites into which that waste has been placed here in the United States?

Mr. CREAMER. Yes, we have. We have taken waste into Clive from Taiwan, the U.K., Germany, France, Canada, Mexico. We have taken those wastes in. Some of the wastes have come and gone through Bear Creek and have been incinerated or metal melted and so what we take is the residuals off of those. It is basically under the NRC and the State of Tennessee rules that once the shape, the whole form of the material has been changed, it is actually Tennessee waste rather than foreign waste, but we have taken materials from all of those countries into Clive.

Mr. BOUCHER. And all of that has gone eventually to Clive?

Mr. CREAMER. All that has gone eventually to Clive.

Mr. BOUCHER. Do you have current plans to file other applications for the importation of waste?

Mr. CREAMER. You know, we would in the future for certain types of situations. We firmly believe that what we are doing is trying to enhance an American company's position in the world.

Mr. BOUCHER. But can you identify the countries from which you currently have plans to import waste?

Mr. CREAMER. We have none from any existing ones other than Italy right now. I mean, over the past 3 years since I've been the CEO of EnergySolutions, we have had requests from several countries to bring their waste to the United States and we have not even considered them because we did not see any reason to do that thing. With Italy, we felt like that there was a significant role that we could play in helping Italy and furthering an American company's position in the world and so we agreed to——

Mr. BOUCHER. So to paraphrase that answer, you probably will file applications for the importation of waste from other countries but you are not prepared to identify them today?

Mr. CREAMER. That is correct. We have no plans today from anyone.

Mr. BOUCHER. Let me ask the question in a slightly different way. Can you make an estimate today of the total amount of waste that it is your intention to import from overseas?

Mr. CREAMER. Well, as we have said, that we absolutely under no circumstance would go above 5 percent of the remaining capacity at the Clive facility.

Mr. BOUCHER. That would be the upper limit?

Mr. CREAMER. That would be the very upper limit, and realistically, I don't think we would ever reach that limit.

Mr. BOUCHER. That is a commitment which I understand you have made on behalf of EnergySolutions. Would you be willing to reduce that commitment into a legally binding obligation?

Mr. CREAMER. Absolutely. We would be more than happy to add that to our license with the State of Utah to voluntarily ask the State of Utah to add that to our license.

Mr. BOUCHER. Mr. Aloise, let me simply ask one question of you. You have made an estimate that there is 33 years of additional capacity at the low-level disposal sites in the United States, and as

I understand it, that estimate of capacity did not include the importation of waste from overseas. Is that correct?

Mr. ALOISE. That is correct.

Mr. BOUCHER. If you include the importation of waste from overseas as you currently estimate that volume of imports to be, how many years of capacity would we have to dispose of low-level waste at our domestic sites?

Mr. ALOISE. Mr. Chairman, we don't have that information. We didn't look at the volumes overseas.

Mr. BOUCHER. That concludes my questions, and at this time I recognize the gentleman from Michigan, Mr. Upton, for 5 minutes.

Mr. UPTON. Thank you, Mr. Chairman.

Mr. Aloise, just to expand on the chairman's question, did you focus also on the level of A, B, and C waste in terms of the capacity remaining or was it collectively just one number?

Mr. ALOISE. What we were talking about is the Clive facility Class A waste.

Mr. UPTON. Mr. Creamer, how many years do you think you have remaining at this site? I have been to Utah a good number of times. It is a great State. I don't think I have been in that area. I have stayed on the slopes versus to the west. It is to the west, right, of Salt Lake City?

Mr. CREAMER. That is correct.

Mr. UPTON. How many years do you think you have at this——

Mr. CREAMER. We have over 30 years of capacity. We would agree with the GAO report, and that is existing permitted capacity. That is not—I mean, just by simply going up to the height that geologically it could handle there, you could double the capacity if you wanted to, but we are not—I mean, we have an agreement with our governor and so the existing capacity is what we have there today to work with, and so we believe we have that same capacity.

Mr. UPTON. So what happens to your company in 30 years?

Mr. CREAMER. We are the Number 1 leading company in the world to reduce the amount of waste. For example, the B and C waste going to Barnwell, so you get an example, Clive last year and continuing will take 5 to 6 million cubic feet of waste a year. The B and C waste generated in America today is between 10,000 and 12,000 cubic feet. So the difference between 6 million cubic feet of A waste, 10,000 of B and C waste. About half of the B and C waste is water treatment plant resins in power plants. You can keep them from becoming B and C waste by simply changing the amount more often and so you don't create B and C waste and so it stays as Class A waste. So we are working with utilities to do that but also in everything that they do. We work with them on a daily basis and we are the leading driver down of the amount of waste that is generated, and that is part of our business. We have a very strong technology business, not just a waste business.

Mr. UPTON. And how did the discussions start with the Italians? Did they approach you? Did you approach them? How did this all come about, and how long has it been in the offing?

Mr. CREAMER. Well, Number 1, I should mention, we do not have a contract with Italy at this time. I mean, we don't have a contract with them for disposal of waste. We do at this time have a contract where we are cleaning a fuel pool in Italy. They approached us about a year ago when we started working in the U.K. actually operating and decommissioning plants. We operate four reactors that are generating power, 18 reactors that we are decommissioning that are identical to one of the three reactors that they have in Italy that they need some help with. One of the other ones is exactly like the Big Rock Point reactor that is in your State.

Mr. UPTON. Which is Michigan.

Mr. CREAMER. It is in Michigan.

Mr. UPTON. Not my district but it is——

Mr. CREAMER. It is in Michigan and it is the twin sister to that plant that EnergySolutions also decommissioned up in Michigan.

Mr. UPTON. Now, you take waste from literally all 104 different operating plants in the United States?

Mr. CREAMER. A hundred and three. There is one that is located in the Northwest Compact but we have taken New Jersey, South Carolina, and Connecticut. All are in the Southeast Compact but we have taken waste, we continue to take waste from all of those.

Mr. UPTON. Are the contracts, are they done every 2 years, 5 years? I mean—

Mr. CREAMER. We offered every power——

Mr. UPTON. For example, I have two plants, Palisades and Cook, so I don't know if you know offhand what the relationship is——

Mr. CREAMER. They are both under life-of-plant agreements. Well, no, Cook is not. Cook with AP is not under life-of-plant agreement. When I took over the industry, I felt the most important thing for the nuclear industry in this country was to bring stability, not just stability in high-level waste that was mentioned but also stability in low-level waste. So we offered every power plant in the Nation a life-of-plant agreement where we would reserve capacity at Clive for them for not only their ongoing waste through the life of the plant but also their decommissioning waste.

Mr. UPTON. So when they are relicensed, both Cook and Palisades were given additional years so you had space and you were——

Mr. CREAMER. We have space and——

Mr. UPTON. It was an addendum that you added to the contract and you have got space for them?

Mr. CREAMER. That is correct.

Mr. UPTON. Thank you, Mr. Chairman. I yield back.

Mr. BOUCHER. Thank you, Mr. Upton.

The gentleman from Utah, Mr. Matheson, is recognized for 5 minutes.

Mr. MATHESON. Thank you, Mr. Chairman.

Mr. Aloise, in your testimony we talked about this estimated capacity, and at one point it was 19 years, now we moved it up to 32, 33 years. That is sort of the range we are talking about. As you confirmed in answers to a couple of questions, your analysis did not assume imports of foreign waste. Did your analysis, as I understand it, was based on—the updated number was based on volumes for 2007?

Mr. ALOISE. Around those, yes.

Mr. MATHESON. You are aware 2007 was a lower year because of——

Mr. ALOISE. Yes.

Mr. MATHESON. OK. Do you think that that was an aberration? Did you take into consideration potential increases in the future compared to 2007?

Mr. ALOISE. That estimate—and again, we got that information from the disposal operator and DOE—was approximately 4.5 million cubic feet times 33 years equals——

Mr. MATHESON. So your analysis didn't include any expansion of waste from any future DOE cleanups or any increase in decommissioning waste from the United States or the fact we have got, I think it was mentioned in somebody else's opening statement, 32 applications for new nuclear power plants in this country pending before the NRC. Now, you didn't project growth of waste from those new plants?

Mr. ALOISE. That is correct.

Mr. MATHESON. OK. In the context of making radioactive waste policy over time, is there an assumption that 33 years is a long time, or did you not make that—I assume GAO doesn't necessarily make that judgment.

Mr. ALOISE. No, we didn't make that judgment, and we are aware, it is our understanding that there will be large volumes from DOE eventually being made available for disposal but we don't know where that will be disposed.

Mr. MATHESON. Would you suggest, when you say you are aware, that eventually that will happen? That will be within the next 30 years?

Mr. ALOISE. Some of it probably, yes.

Mr. MATHESON. OK. That is helpful. I would just say for the record, I think 30 years isn't that long amount of time, myself, but I think that this is a number that is moving around but whether it is 30 years or whether it is 20 years or whether it is 40 years, I think we have a certain amount of capacity in this country for our low-level waste and we ought to put that into consideration of this bill.

Mr. Aloise, just for the record, let me ask some real quick questions. How many low-level waste storage facilities are there in the United States?

Mr. ALOISE. Excuse me?

Mr. MATHESON. How many low-level waste storage facilities are there in the United States? Low-level radioactive waste. I assume there are three. That is what I have assumed.

Mr. ALOISE. Oh, the three disposal facilities?

Mr. MATHESON. Three disposal sites.

Mr. ALOISE. Yes. I am sorry.

Mr. MATHESON. How many of these sites are designated storage sites for one of the compacts?

Mr. ALOISE. How many of them belong to compacts?

Mr. MATHESON. How many are designated as storage sites for one of the compacts?

Mr. ALOISE. Two, I believe.

Mr. MATHESON. OK. And how many of the three sites regularly accept commercial waste from other parts of the country?

Mr. ALOISE. I am not clear on that.

Mr. MATHESON. I assume it is just one. There is only one site that takes it outside their compact. It is the Clive site.

Shifting to Europe, do you know how many low-level waste storage facilities are there?

Mr. ALOISE. In Europe?

Mr. MATHESON. In Europe.

Mr. ALOISE. No.

Mr. MATHESON. Do you know how many countries have nuclear facilities that produce low-level waste?

Mr. ALOISE. We surveyed 20 countries. We got responses from 18 that have nuclear facilities.

Mr. MATHESON. Do you know how many of those 18 accept waste from other countries?

Mr. ALOISE. I do not.

Mr. MATHESON. Have you done an assessment of the total volume of European low-level waste that is in need of disposal?

Mr. ALOISE. No, we didn't look at the volumes.

Mr. MATHESON. Have you done an assessment of the capacity that exists in Europe for storing its waste?

Mr. ALOISE. No.

Mr. MATHESON. It is my understanding that GAO spent a lot of time looking in Europe at nuclear waste disposal sites.

Mr. ALOISE. Well, what we were looking at is basically how they manage their waste.

Mr. MATHESON. OK. That is helpful. You specifically looked at the situation in Italy. Is that correct?

Mr. ALOISE. Italy was one of the countries we surveyed.

Mr. MATHESON. Italy shut down its nuclear energy plants after the Chernobyl incident over 20 years ago and since that time, those last 20 years, I think your testimony indicates Italy has not implemented a low-level waste storage site in its borders. Do you have a sense if it is—I know you mentioned various countries have plans to do this. Is Italy even close to licensing a site?

Mr. ALOISE. They had plans, but whether they are close or not, we are not clear.

Mr. MATHESON. My understanding is, there is a lot of opposition in that country.

Mr. ALOISE. There is.

Mr. MATHESON. Is there any country when you surveyed, those 18, who indicated that they wanted to take other countries' nuclear waste as well?

Mr. ALOISE. We didn't ask that question, sir.

Mr. MATHESON. All right, Mr. Chairman, I will yield back. Thank you.

Mr. BOUCHER. Thank you, Mr. Matheson.

The gentleman from Kentucky, Mr. Whitfield, is recognized for 5 minutes.

Mr. WHITFIELD. Thank you very much.

Mr. Creamer, how many other countries accept low-level waste from other countries today?

Mr. CREAMER. There are countries who take it in for recycling. For example, Sweden is the other location that is just like Bear Creek that has an incinerator and a metal melt facility. They bring the waste into that country. They process it but they do send the residuals back to the country of origin rather than leave the waste there. But France and the U.K. both have a long history of accepting high-level waste for recycling and then they store it for quite a long period of time in the tens to hundred years, the waste that comes off of that, but ultimately it would also be shipped back to the country of origin. But both France and the U.K. have a long history of taking nuclear material, all the rest of the countries and the U.K.'s spent nuclear fuel, high-level waste and recycling it.

Mr. WHITFIELD. Now, you had mentioned in your testimony that your company is doing a lot with other countries to help them develop the capability to——

Mr. CREAMER. It is not unlike the first project. The first time that the New York Port Authority wanted to clean up the port in the New York Harbor that had contaminated PCBs and dioxins, we did the first project there and it did not stay in New York or New Jersey. After we taught them how to it and showed them how reasonable it was to do it, we were able to establish facilities right there in the Port of New York, and if you go up to the big mall in Elizabeth, New Jersey, it is built on dredge spoils that I did in a previous life before I got in the radioactive business, when I was in the chemical waste business, where we pulled out dioxins and PCBs and taught New York and New Jersey how to be able to do that by teaching them by example, which is what we hope to be able to do here.

Mr. WHITFIELD. And you are working with several other countries right now?

Mr. CREAMER. Several other countries around the world. That is correct.

Mr. WHITFIELD. Now, obviously with a company like EnergySolutions, you are always looking out into the future, and I know you are already thinking about when the Clive facility reaches its capacity. How difficult is it to come up with additional storage space and the regulatory process? How difficult is that and complex is that?

Mr. CREAMER. I think it is important to note that the Clive facility is one square mile less 100 acres which has a DOE disposal site on it that the DOE sited for a major cleanup that was uranium mill tailings that was left in downtown Salt Lake City back in the middle 1980s, they created it, so it is actually 540 acres in size. That 540 acres will handle all of the radioactive material that is currently in the United States today. I mean, if you take everything that will not go to existing DOE sites, if you take that, you do that and you still have extra capacity. The one nice thing about low-level radioactive waste, it is not a large volume. I mean, you need to have regional facilities because it is hard—from a cost standpoint, it is hard to run little tiny sites and properly regulate small little sites and so that is why the other compacts haven't been able to site sites. They have had NIMBY problems. They have issues. But all of the radioactive waste in America that is currently here today and for many, many years into the future as the new designs that Westinghouse and GE have for new reactors, they create much less waste than the old plants do and so we have significant capacity just there in that one square mile. And we every day are creating less and less waste.

Mr. WHITFIELD. I don't want to get into the lawsuit, but just out of curiosity, in this May 18th letter that the Northwest Compact wrote, what allegations or what facts do they base it on that there is no authorized legally acceptable facility to take care of this waste?

Mr. CREAMER. We have a disagreement with the Northwest Compact, and that is why when we talk about lawsuits, we are not suing for damages, we are not doing anything like that. This is a declaratory judgment which was set up by the founding fathers where when you have a disagreement over a Federal law, you go to a Federal court and you ask that Federal court to declare what the law says, and that is what we asked for a clarification from the court. Does the Northwest Compact have authority over Clive or does it not? We believe it does not. We believe the law specifically talks about facilities that were created for the compact. This is not a compact facility. This is a private facility that just happens to be inside the boundary of the Northwest Compact but it is not a compact facility, and we think that is what the law says. They have a differing opinion and we just plain asked the court. We are not suing anybody for money. We are not doing anything like that. We just basically asked the court to tell us in their opinion—to rule and say what the law says and that is all we have asked. It has got nothing to do with money. It is nothing to do with hostilities. You know, it is just us asking a question.

Mr. WHITFIELD. Mr. Chairman, I see my time is expired.

Mr. BOUCHER. Thank you, Mr. Whitfield.

The gentleman from Texas, Mr. Hall, is recognized for 5 minutes.

Mr. HALL. I thank you, Mr. Chairman.

Mr. Creamer, have you read the GAO highlights Mr. Aloise put out—why the GAO did this study? Have you seen that?

Mr. CREAMER. Yes, I have.

Mr. HALL. And he points out the Nuclear Regulatory Commission ranks low-level radioactive waste according to hazard exposure, Class A, B, and C and greater than Class C. What are we talking about here? Which of those levels do you have?

Mr. CREAMER. At Clive, we can only take Class A. I was hoping there would be an exit sign in this room and a smoke alarm, there is a small smoke detector over here on this side but I am not sure it is one of them, so you get an idea of what we take at Clive. We take the clothing that the people wear around power plants. We take debris that comes from a power plant.

Mr. HALL. And that is Class A?

Mr. CREAMER. That is Class A. For example, the smoke alarm in your bedroom in your house, it has a little tiny source in it that if you pull that source out all by itself, it has too much radioactivity to come to Clive. The exit signs if you go to Europe, the exit signs, every exit sign that comes out of a building there has to be pulled out and kept separately from everything else because that exit sign has a radioactive isotope in it. That radioactive little source that is inside that is too hot to go to Clive. I mean, we take—Class A low-level waste is the lowest of low level.

Mr. HALL. And that is the largest in volume of——

Mr. CREAMER. It is by far the largest, and so we handle large volumes but very, very small amounts of radioactivity.

Mr. HALL. And what the GAO found, as I read it here, they state in contrast, disposal availability for domestic Class A waste is not a problem in the short or longer term, and that is your opinion too?

Mr. CREAMER. That is our opinion also.

Mr. HALL. Well, how long have you been recycling international metals in Tennessee and disposing of the waste in Utah?

Mr. CREAMER. Recycling for 12 years, disposing for 8 years.

Mr. HALL. And I think you stated that in 2006 you were granted a license to import up to 6,000 tons of the same type of material from Canada that you are seeking to import from Italy?

Mr. CREAMER. That is correct.

Mr. HALL. Were the States of Utah and Tennessee and the Northwest Compact aware that the international material was being disposed of at the Clive, Utah, facility?

Mr. CREAMER. Yes.

Mr. HALL. And do you want to expound on that?

Mr. CREAMER. Well, on several different occasions, in fact an interesting one in 1998, there was an import license approved to bring waste into the State of Washington and do some work on it, then dispose of it in the Richland facility up there, which is the compact facility. That Taiwanese waste got stranded, sat there for 10 years because a company didn't have the financial wherewithal to handle it, and so it was recently purchased by another company and the Northwest Compact asked us to take that Taiwanese waste to Clive because they didn't want to take it to their facility there but it was actually originally approved to go to that facility in Washington, so that is where we got the Taiwan waste from.

Mr. HALL. And I am trying to lead up to the most important question I think I will ask. Did Tennessee or Utah or the Northwest Compact ever object to international material being processed in Tennessee or disposed of in Utah——

Mr. CREAMER. No.

Mr. HALL [continuing]. To your knowledge ever?

Mr. CREAMER. No.

Mr. HALL. And in fact, you know of several instances where the States and the compact wrote to the NRC and said they had no issues with this?

Mr. CREAMER. That is correct, and I think there are attachments to my testimony that indicate that.

Mr. HALL. And I guess the main question, I think the one everybody is probably most interested in and the question that needs to be answered, what service do you give to the rest of this country, to the United States and does EnergySolutions have enough capacity at your disposal facility in Utah to handle the waste generated here in the United States and keep doing what you are doing?

Mr. CREAMER. I believe we provide a great service. The chief nuclear officer from Exelon, who has a lot of plants in the Congressman from Illinois's district, he called our governor about 3 years ago and he says Clive is a national asset, it is incredibly important to our—you know, it is easy to store Class B and C waste because of the very, very small volume. It is very hard to store onsite Class A waste because it is a much larger volume which you have to have. We are important to this industry. We have tried to bring great stability, and I think if you talk to all of our customers, you will find we have brought great stability in the last 3 years to this country's nuclear industry and thus the nuclear renaissance, which I personally firmly believe we need to do.

Mr. HALL. And if we got to the position where you couldn't for some unforeseen situation take care of the foreign waste coming in and the domestic waste, where would your loyalty lie?

Mr. CREAMER. Maybe I should show you—my staff made this pretty picture. That is the Clive facility all the way to the top. This is how much we filled because we had some huge, big DOE projects in the past that filled up, that took a lot of it, but that is the remaining capacity. The Italy waste is about that much. That is what would go to Clive, I mean, just a pinch.

Mr. HALL. Can you say "that much" to where we can get it in the record?

Mr. CREAMER. It is three ten-thousandths.

Mr. HALL. And that is a conservative estimate?

Mr. CREAMER. That is a conservative estimate. We do not want to bring wholesale radioactive waste into this Nation. All we want to do is use it to try to position our company to have an American company build a strong position internationally and what I believe is one of the most important technologies and one of the most important industries.

Mr. HALL. So a lot of the questions that you have been asked have indicated that you are bringing waste into this country, you are attracting waste but you are also taking care of it.

Mr. CREAMER. Well, no one does—I mean, we have the world's best facilities. There is no question about it.

Mr. HALL. So instead of a problem, aren't you part of the solution?

Mr. CREAMER. Well, that is our tag line, EnergySolutions, we are part of the solution.

Mr. HALL. I guess that might be a dang good one to quit on.

Mr. BOUCHER. Thank you very much, Mr. Hall.

The gentleman from Illinois, Mr. Shimkus, is recognized for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. It is an interesting note, we are talking about Italy. I read a story on the Floor debate. I have been really involved in the energy supply debate and Italy is moving to coal in the era of Kyoto because we need electricity and we need energy and maybe they ought to think about restarting of their nuclear power plants and getting back into that business. Congressman Hall kind of took some of the lines but the reason why we don't—since it is such a bulky material really from a business perspective, the cost-benefit analysis of a consolidated location is cheaper and safer. that is kind of my analysis.

Let us assume, and I was going to ask, is that little thing behind that, is that anything——

Mr. CREAMER. That is a shield block. That is the recycled metals. In real life, they are a meter by a meter by a half a meter. Today we sell every one of them that we can make. Our metal melt facility only operates about 2 months a year. That is all the metal that we get to melt there is about 2 months a year worth. Every one of these today is going to Japan and going in their new big accelerator that is going over there as being reused in the nuclear industry for shielding sources of radioactivity, but that is a little shield block.

Mr. SHIMKUS. Thanks. I was wondering what that big thing was for the whole hearing. I am glad Mr. Hall asked and you were able to use it in response. If that were to fill up and since you have international exposure and international expertise, I mean, assuming 30, 40 years from now, however long, and we eventually get there, and the NIMBY factor kicks in in the United States, with your international exposure, could you see peddling this ability to other countries for site location and storage?

Mr. CREAMER. We are working—we believe in regional sites and we are working both in Asia and in Europe trying to find willing hosts who would be willing to accept these types of things. We think that is the proper thing to be done and we are working very hard to do it. But today we have world-class facilities that we believe can better position ourselves to help other countries, to show other countries how safe this is and that it can be done by utilizing these world-class facilities.

Mr. SHIMKUS. So in the future, that little, I don't know, a sugar packet or whatever——

Mr. CREAMER. It was a salt packet. The sugar packet was too big.

Mr. SHIMKUS. That could be the United States to some foreign facility 40, 50 years from now?

Mr. CREAMER. Well, there has been stuff leaving the United States. Italy, for example, has accepted back in the 1980s, because they were going to build a reprocessing plant, they accepted 5 tons of spent nuclear fuel from a plant that was up in Minnesota; the Elk Creek plant. That 5 tons of fuel still sits in Italy. They still have it from the United States. And one gram of that spent nuclear fuel has more radioactivity than this 20,000 tons we are talking about, just so it is clear.

Mr. SHIMKUS. And you have life-of-plant agreements with nuclear plants in Illinois. Is that correct?

Mr. CREAMER. Exelon was the first one that signed for all 17 of their plants.

Mr. SHIMKUS. And are the EnergySolutions U.S. processing—let me ask, people are trying to say don't bring this into the energy debate, it is not part of the energy debate. Would you disagree with that? Should this be part of, if we want to bring more supply on this country, is the ability to have this location critical?

Mr. CREAMER. I think Clive is critical to the U.S. nuclear utilities. I think they would tell you the same thing. We also believe that what we are talking about doing here, we think strong U.S. companies. America has kind of gone to sleep the last 30 years. EnergySolutions has brought together nine companies over the last 3 years to try to build a company large enough in the United States to be able to be a long-term player and a solid player that could play on the international market. Today the French, the Japanese——

Mr. SHIMKUS. Let me ask a question because my time is running short. Are you involved in any negotiations with China?

Mr. CREAMER. China is looking at our vitrification technology. We have the Number 1 vitrification technology in the world.

Mr. SHIMKUS. I have been quoting China as planning to build 47 new nuclear power plants in the upcoming years, so this would segue into that debate, would it not?

Mr. CREAMER. We have been consulting with them on how to handle their high-level waste right now.

Mr. SHIMKUS. OK, Mr. Chairman, thank you. I yield back.

Mr. BOUCHER. Thank you, Mr. Shimkus.

The gentleman from Tennessee, Mr. Gordon, is recognized for 5 minutes.

Mr. GORDON. Thank you, Mr. Chairman. We have gone a long time, so let me just make a few summary statements here.

First of all, I want to make it very clear that I am not anti-nuclear energy and I am certainly not anti-EnergySolutions. I think they serve a very valid, important function for our country. It was interesting, I just heard—Mr. Shimkus and Mr. Creamer were just talking about how important Clive is to really the nuclear industry in this country. It is absolutely important. It may just be very—the radioactivity that goes there may be very minor but there is no place else for it really to go. If it shuts down, it shuts down everything else. And so that is why this issue is very important and that is why I am concerned about losing that capacity and what impact it is going to have on the nuclear industry here. And again, I don't see why we would want to give up even 5 percent, but Mr. Creamer, you said you wanted to make this voluntary. Your successor may not agree with you. Your board of directors may say that they have a responsibility to their shareholders and not go along with this. So that is a little loosey goosey.

Also just to point out, you did mention that there are other locations, a couple other locations in the world that reprocess. Yes, they reprocess but they send it back. We are the only country, the United States of America is the only country in the world that accepts foreign low-level radioactive waste. I think Mr. Hall had read some nice comment that the governor or Utah had made about your company a year ago. I will just remind everyone that that same governor has instructed his member on the board to vote against allowing foreign radioactive waste to come in here and you are suing him or you are suing them now, or you are asking for a declaratory judgment, which means you are going to court to do that. You say in the 1980s that Italy took some of our waste. Well, here in 2007, there is a major Italian protest with thousands of people coming out saying we don't want any low-level radioactive waste, send it somewhere else. So that is certainly not going to happen.

And finally, Mr. Chairman, you were trying to get to the point and you couldn't really get to it, how much of that foreign waste is out there. Nobody really knows but let me give you some information. There are 197 operating generating facilities in Europe and there are 90 more that already shut down or will soon be shut down. That is only in Europe. It doesn't count Mexico, Canada, or elsewhere. You know, 30 years, if I was in as good shape as Mr. Hall, 30 years is a way down the road, but I am getting a little shorter in the tooth here, or longer in the tooth, and 30 years to me versus 30 years to my daughter is two different things. This amount we have got there, again, that is also very loosey goosey.

Just last November, EnergySolutions in their prospective said that there was only 19 years left. Mr. Aloise in his testimony said that basically he is building that on information that he got from EnergySolutions and he is not taking into account foreign waste coming in, not taking into account an increase in the amount of waste produced in this country, only based on 1 year, an anomaly, I would say, of a year where there was a smaller amount. So we don't know how much it is, whether it is 10, whether it is 19, whether it is 30, but what we do know is, there is a finite amount of space and when that finite space is gone, our nuclear industry shuts down in this country.

For that reason, Mr. Chairman, I would again say to you, NRC has said they can't do anything, it has to be the local compacts. The local compact says OK, we want to do something, stop it, and then EnergySolutions says we are going to sue you so you can't do that. That is why this legislation is needed.

Thank you for providing us that opportunity in the hearing today, and I yield back the balance of my time.

Mr. BOUCHER. Well, in fairness to Mr. Creamer, I know what he wants to say. Let me just give him an opportunity to reaffirm the commitment he has made, that EnergySolutions is willing to reduce to a binding legal obligation the 5 percent capacity limitation that he previously announced.

Mr. GORDON. Subject to his board's approval.

Mr. CREAMER. No, I have my board approval. I have my board approval. We will put it in the license. There is no question about that.

Mr. GORDON. And could that license be renegotiated later?

Mr. CREAMER. I guess it could but it would be very, very difficult to do. It would be very difficult to do. We all live a certain life and we die but I don't see that ever changing.

Just a couple of other things. GE has shipped some blades from power plant waste that they take back in some of their stuff that has been shipped to Kazakhstan and the residuals from the recycling in Kazakhstan has stayed in Kazakhstan. So there is other— we are not the only one who has taken it. It was U.S. waste that went to Kazakhstan. This has happened in the last few years.

Mr. GORDON. Any other Third World countries that you want to cite?

Mr. CREAMER. No, that is the only one I know.

Mr. GORDON. OK.

Mr. CREAMER. You know, the 19 years versus the 30 years, we closed down the Rocky Flats facility and the Fernald facility. We took all the waste from those two DOE facilities and that is what made 2005 and 2006 big years. When you file an S-1, they want everything. The attorneys get on you to make sure everything is perfect, so if you take our remaining capacity and divide it by 2006, which is a bigger year caused by the final closure of Rocky Flats and Fernald in Ohio, that is what caused that year to come down, but on an ongoing basis, we have looked at it 20 times over because we have made specific contractual obligations to those 83 power plants that they do have capacity for their decommissioning, whether it be 30 years or 60 years from now. They have the capacity committed to them no matter how long it is when it comes out and so we have taken care of that and done that. So in our own way, we try very hard.

Mr. GORDON. And what about those other 30 or so plants that appear to be coming up in the next few years?

Mr. CREAMER. We would hope that we would be able to handle those also.

Mr. BOUCHER. At that point I think we can say we have heard this matter today. I want to express appreciation to our witnesses for sharing their views with us and answering our questions, and this hearing stands adjourned.

[Whereupon, at 12:32 p.m., the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Northwest Interstate Compact
On Low-Level Radioactive Waste Management
P.O. Box 47600. Olympia, Washington 98504-7600. (360) 407-7102. Mike Garner, Executive Director

May 16, 2008

U.S. Congressman Jim Matheson (UT-02)
1323 Longworth House Office Building
Washington, D.C. 20515

SUBJECT: The Northwest Compact's perspective on issues surrounding the importation of nuclear waste and the authorities granted to the Compact under the Low Level Radioactive Waste Policy Amendments Act of 1985.

Dear Representative Matheson:

Thank you for the opportunity to provide comments in advance of the May 20, 2008, hearing on H.R. 5632 to be held by the U.S. House of Representatives Subcommittee for Energy and Air Quality.

In the late 1970's Nevada, South Carolina, and Washington, the three states with operating low-level radioactive waste disposal facilities, sent a strong message to states throughout the nation. It was time for the burden of low-level radioactive waste disposal to be distributed equitably among all states. This led to adoption of the Low-Level Radioactive Waste Act of 1980 and the Low-Level Radioactive Waste Policy Amendments Act of 1985.

Federal law provided incentive for states to form interstate compacts and develop new disposal capacity for low-level waste generated within the member states of an interstate compact. Beginning January 1, 1993, interstate compacts with operating disposal facilities could choose to deny access to their region for disposal of out-of-region low-level radioactive waste. The Northwest Compact exercised its exclusionary authority on this date.

The Northwest Compact statute (attached), as authorized by Congress, in Article IV, Section 2 and Article V clearly states the requirements for providing access to the region for disposal of out-of-region low-level waste.

ARTICLE IV, SECTION 2

> ***No facility located in any party state may accept low-level waste generated outside the region comprised of the party states, except as provided in Article V.***

ARTICLE V

> ... ***Not withstanding any provisions of Article IV to the contrary, the committee may enter into arrangements with states, provinces, individual generators, or regional compact entities outside the region comprised of the party states for access to facilities on such terms and conditions as the committee may deem appropriate. However, it shall require a two-thirds vote of all such members, including the affirmative vote of the member of any party state in which a facility affected by such arrangement is located, for the committee to enter into such arrangement.***

Prior to 1993, the state of Utah and Envirocare of Utah (now EnergySolutions) came to the compact seeking an exemption to the compact's exclusionary authority. The Northwest Compact committee adopted a resolution constituting an arrangement to provide access for certain out-of-region low-level waste to be disposed at Envirocare's facility located in Clive, Utah. The resolution has been amended and is now referenced as the Third Amended Resolution and Order.

As you are aware, EnergySolutions has submitted an import license request to the U.S. Nuclear Regulatory Commission (NRC) to import 20,000 tons of low-level radioactive waste from Italy. The request states that material which cannot be decontaminated or recycled will be processed at Duratek, a subsidiary of EnergySolutions, located in Tennessee and shipped to the EnergySolutions Utah facility for disposal. The amount of low-level waste requiring disposal is projected to amount to 1,600 tons, approximately 80,000 cubic feet of low-level radioactive waste.

The Northwest Interstate Compact committee met on Thursday, May 8, 2008, in Boise, Idaho. The committee determined it would need to adopt an arrangement prior to foreign waste being provided access to the region for disposal in Utah. This did not occur.

The committee chose to adopt a clarifying resolution (attached) reaffirming its position that the Third Amended Resolution and Order serves specifically as an arrangement for out-of-region low-level radioactive waste from unaffiliated states and compacts. It further clarifies the Third Amended Resolution and Order does not serve as an arrangement for foreign waste. The committee has never discussed an arrangement for foreign waste. The clarifying resolution also addresses foreign-generated waste that is characterized as domestic-generated waste by another compact or unaffiliated state.

EnergySolutions has filed a lawsuit against the Northwest Compact. The lawsuit asserts the EnergySolutions Utah facility does not operate under the authority of the Northwest Compact. If they prevail on this issue the state of Utah is left with no control over the low-level waste proposed for disposal at EnergySolutions facility in Utah. The lawsuit also claims the NRC has sole authority for approving import license proposals involving the importation of foreign low-level radioactive waste for disposal at facilities located within the United States. If the sole criterion used by the U.S. Nuclear Regulatory Commission for approval of an import license request is the technical capability of the targeted disposal facility to accept waste for disposal, then foreign waste would be provided access to every operating low-level waste facility in the country.

This is a significant issue for our country. The current system for managing low-level radioactive waste within our country is at risk. The primary premise of the federal law is that interstate compacts are provided the ability to control the out-of-region low-level radioactive wastes disposed within their borders. If interstate compacts do not have the ability to exclude out-of-region foreign low-level waste the country will be in an even worse position than it was when Nevada, South Carolina, and Washington took action leading to adoption of the current law.

Again, thank you for providing me with the opportunity to provide comments in advance of the subcommittee's hearing on Tuesday, May 20, 2008.

Sincerely,

Mike Garner

Mike Garner, Executive Director
Northwest Interstate Compact

cc: Northwest Compact Committee
Attachments

Northwest Interstate Compact
On Low-Level Radioactive Waste Management
P.O. Box 47600. Olympia, Washington 98504-7600. (360) 407-7102. Mike Garner, Executive Director

RESOLUTION CLARIFYING THE THIRD AMENDED RESOLUTION AND ORDER

Whereas, the Compact Committee continues to support the Low-Level Radioactive Waste Policy Amendments Act, Public Law 99-240;

Whereas, no facility located in any party state may accept low-level radioactive waste generated outside the region comprised of the party states, prior to an arrangement being adopted by the Compact Committee in accordance with Articles IV and V of the Compact statute;

Whereas, the Compact Committee most recently approved on May 1, 2006, the Third Amended Resolution and Order that serves as an arrangement that provides certain access to the region to low-level radioactive wastes generated in unaffiliated states and compacts that meet the requirements of the Third Amended Resolution and Order for disposal at the EnergySolutions facility in Clive, Utah;

Whereas, the Third Amended Resolution and Order does not address foreign low-level radioactive wastes and the Compact Committee has never considered or reviewed the issue of adopting an arrangement that would provide low-level radioactive wastes generated in foreign countries access to the region for disposal at the EnergySolutions facility in Clive, Utah;

BE IT HEREBY RESOLVED AND ORDERED THAT:

The Third Amended Resolution and Order does not serve as an arrangement for disposal of low-level radioactive wastes generated in foreign countries – including foreign-generated waste that is characterized as domestic generated waste by another compact or unaffiliated state, and such an arrangement, as required by Articles IV and V of the Compact statutes, would need to be adopted by the Compact Committee prior to foreign-generated low-level radioactive wastes being provided access to the region for disposal at EnergySolutions facility in Clive, Utah.

As approved by the Northwest Interstate Compact on Low-Level Radioactive Waste Management, I execute this Resolution on the 12th day of May 2008.

Lawrence Goldstein, Chair
Northwest Interstate Compact on
Low-Level Radioactive Waste Management

Chapter 43.145 RCW

Northwest interstate compact on low-level radioactive waste management

Chapter Listing

RCW Sections

43.145.010 Compact.

43.145.020 Requirements of Washington representative to Northwest low-level waste compact committee.

43.145.030 Rule-making authority.

Notes:

Radioactive Waste Storage and Transportation Act of 1980: Chapter 70.99 RCW.

43.145.010
Compact.

The Northwest Interstate Compact on Low-Level Radioactive Waste Management is hereby enacted into law and entered into by the state of Washington as a party, and is in full force and effect between the state and other states joining the compact in accordance with the terms of the compact.

NORTHWEST INTERSTATE COMPACT ON

LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT

ARTICLE I -- Policy and Purpose

The party states recognize that low-level radioactive wastes are generated by essential activities and services that benefit the citizens of the states. It is further recognized that the protection of the health and safety of the citizens of the party states and the most economical management of low-level radioactive wastes can be accomplished through cooperation of the states in minimizing the amount of handling and transportation required to dispose of such wastes and through the cooperation of the states in providing facilities that serve the region. It is the policy of the party states to undertake the necessary cooperation to protect the health and safety of the citizens of the party states and to provide for the most economical management of low-level radioactive wastes on a continuing basis. It is the purpose of this compact to provide the means for such a cooperative effort among the party states so that the protection of the citizens of the states and the maintenance of the viability of the states' economies will be enhanced while sharing the responsibilities of radioactive low-level waste management.

ARTICLE II -- Definitions

As used in this compact:

(1) "Facility" means any site, location, structure, or property used or to be used for the storage, treatment, or disposal of low-level waste, excluding federal waste facilities;

(2) "Low-level waste" means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities which exceed applicable federal or state standards for unrestricted release. Low-level waste does not include waste containing more than ten nanocuries of transuranic contaminants per gram of material, nor spent reactor fuel, nor material classified as either high-level waste or waste which is unsuited for disposal by near-surface burial under any applicable federal regulations;

(3) "Generator" means any person, partnership, association, corporation, or any other entity whatsoever which, as a part of its activities, produces low-level radioactive waste;

(4) "Host state" means a state in which a facility is located.

ARTICLE III -- Regulatory Practices

Each party state hereby agrees to adopt practices which will require low-level waste shipments originating within its borders and destined for a facility within another party state to conform to the applicable packaging and transportation requirements and regulations of the host state. Such practices shall include:

(1) Maintaining an inventory of all generators within the state that have shipped or expect to ship low-level waste to facilities in another party state;

(2) Periodic unannounced inspection of the premises of such generators and the waste management activities thereon;

(3) Authorization of the containers in which such waste may be shipped, and a requirement that generators use only that type of container authorized by the state;

(4) Assurance that inspections of the carriers which transport such waste are conducted by proper authorities, and appropriate enforcement action taken for violations;

(5) After receiving notification from a host state that a generator within the party state is in violation of applicable packaging or transportation standards, the party state will take appropriate action to assure that such violations do not recur. Such action may include inspection of every individual low-level waste shipment by that generator.

Each party state may impose fees upon generators and shippers to recover the cost of the inspections and other practices under this Article. Nothing in this Article shall be construed to limit any party state's authority to impose additional or more stringent standards on generators or carriers than those required under this Article.

ARTICLE IV -- Regional Facilities

Section 1. Facilities located in any party state, other than facilities established or maintained by individual low-level waste generators for the management of their own low-level waste, shall accept low-level waste generated in any party state if such waste has been packaged and transported according to applicable laws and regulations.

Section 2. No facility located in any party state may accept low-level waste generated outside of the region comprised of the party states, except as provided in Article V.

Section 3. Until such time as Section 2 takes effect as provided in Article VI, facilities located in any party state may accept low-level waste generated outside of any of the party states only if such waste is accompanied by a certificate of compliance issued by an official of the state in which such waste shipment originated. Such certificate shall be in such form as may be required by the host state, and shall contain at least the following:

(1) The generator's name and address;

(2) A description of the contents of the low-level waste container;

(3) A statement that the low-level waste being shipped has been inspected by the official who issued the certificate or by his agent or by a representative of the United States Nuclear Regulatory Commission, and found to have been packaged in compliance with applicable federal regulations and such additional requirements as may be imposed by the host state;

(4) A binding agreement by the state of origin to reimburse any party state for any liability or expense incurred as a result of an accidental release of such waste during shipment or after such waste reaches the facility.

Section 4. Each party state shall cooperate with the other party states in determining the appropriate site of any facility that might be required within the region comprised of the party states, in order to maximize public health and safety while minimizing the use of any one party state as the host of such facilities on a permanent basis. Each party state further agrees that decisions regarding low-level waste management facilities in their region will be reached through a good faith process which takes into account the burdens borne by each of the party states as well as the benefits each has received.

Section 5. The party states recognize that the issue of hazardous chemical waste management is similar in many respects to that of low-level waste management. Therefore, in consideration of the state of Washington allowing access to its low-level waste disposal facility by generators in other party states, party states such as Oregon and Idaho which host hazardous chemical waste disposal facilities will allow access to such facilities by generators within other party states. Nothing in this compact may be construed to prevent any party state from limiting the nature and type of hazardous chemical or low-level wastes to be accepted at facilities within its borders or from ordering the closure or [of] such facilities, so long as such action by a host state is applied equally to all generators within the region composed of the party states.

Section 6. Any host state may establish a schedule of fees and requirements related to its facility, to assure that closure, perpetual care, and maintenance and contingency requirements are met, including adequate bonding.

ARTICLE V – Northwest Low-level Waste

Compact Committee

The governor of each party state shall designate one official of that state as the person responsible for administration of this compact. The officials so designated shall together comprise the Northwest low-level waste compact committee. The committee shall meet as required to consider matters arising under this compact. The parties shall inform the committee of existing regulations concerning low-level waste management in their states, and shall afford all parties a reasonable opportunity to review and comment upon any proposed modifications in such regulations. Notwithstanding any provision of Article IV to the contrary, the committee may enter into arrangements with states, provinces, individual generators, or regional compact entities outside the region comprised of the party states for access to facilities on such terms and conditions as the committee may deem appropriate. However, it shall require a two-thirds vote of all such members, including the affirmative vote of the member of any party state in which a facility affected by such arrangement is located, for the committee to enter into such arrangement.

ARTICLE VI – Eligible Parties and Effective Date

Section 1. Each of the following states is eligible to become a party to this compact: Alaska, Hawaii, Idaho, Montana, Oregon, Utah, Washington, and Wyoming. As to any eligible party, this compact shall become effective upon enactment into law by that party, but it shall not become initially effective until enacted into law by two states. Any party state may withdraw from this compact by enacting a statute repealing its approval.

Section 2. After the compact has initially taken effect pursuant to Section 1, any eligible party state may become a party to this compact by the execution of an executive order by the governor of the state. Any state which becomes a party in this manner shall cease to be a party upon the final adjournment of the next general or regular session of its legislature or July 1, 1983, whichever occurs first, unless the compact has by then been enacted as a statute by that state.

Section 3. Section 2 of Article IV of this compact shall take effect on July 1, 1983, if consent is given by Congress. As provided in Public Law 96-573, Congress may withdraw its consent to the compact after every five-year period.

ARTICLE VII – Severability

If any provision of this compact, or its application to any person or circumstance, is held to be invalid, all other provisions of this compact, and the application of all of its provisions to all other persons and circumstances, shall remain valid; and to this end the provisions of this compact are severable.

[1981 c 124 § 1.]

43.145.020
Requirements of Washington representative to Northwest low-level waste compact committee.

The person designated as the Washington representative to the committee as specified in Article V shall adhere to all provisions of the low-level radioactive waste compact. In considering special conditions or arrangements for access to the state's facilities from wastes generated outside of the region, the committee member shall ensure at a minimum, that the provisions of Article IV, Section 3 are complied with. After 1992 the Washington representative may approve access to the state's facility only for the states currently members of the Rocky Mountain compact or states which generate less than one thousand cubic feet of waste annually and are contiguous with a state which is a member of the Northwest compact.

[1990 c 21 § 5; 1981 c 124 § 2.]

43.145.030
Rule-making authority.

See RCW 43.200.070.

BART GORDON, TENNESSEE
CHAIRMAN

RALPH M. HALL, TEXAS
RANKING MEMBER

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February 12, 2008

The Honorable Dale Klein
Chairman
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
One White Flint North
Rockville, Maryland 20852

Dear Chairman Klein:

On November 27, 2007, I wrote to you to express my concerns about an application submitted to the Nuclear Regulatory Commission (NRC) by Energy*Solutions*, Inc., for a license to import 20,000 tons of low-level radioactive waste (LLRW) into the United States from Italy for treatment and disposal. Yesterday, the NRC published a notice setting a 30-day comment period for that application in the *Federal Register.*[1] The waste would result from a contract between Energy*Solutions* and Sogin, a government-owned Italian company, which is decommissioning several nuclear reactors. The waste would be processed in Tennessee with the resulting product to be disposed of in Energy*Solutions'* Clive, Utah, Class A disposal site. This application is the first attempt by a U.S. waste processing company to import large amounts of LLRW as part of an agreement to decommission foreign nuclear reactors and, if granted, it is anticipated that many other such license applications will follow.

In addition to providing you with a letter, I recently wrote a letter to the executive director of the Northwest Interstate Compact on Low-Level Radioactive Waste Management, and to the governors of the Compact's member states (copy attached), I want to reiterate and provide additional information to support my opposition to the granting of this license.

Section 274(c)(2) of the Atomic Energy Act clearly places the responsibility for granting licenses for the importing of radioactive waste in the hands of the Commission. However, to approve Energy*Solutions'* license would run counter to congressionally established national policies that stem from the beginning of this nation's role as a generator of nuclear energy. For almost 30 years, Congress has been attempting legislative solutions to the national need for sufficient disposal capacity for LLRW generated here in the U.S. There is no indication in this legislative history, nor in the NRC's regulatory actions, that there was any intention that the United States would ever become a welcome repository of foreign-generated radioactive waste. The Nuclear Waste Policy Act of 1980 (P.L. 96-573) established state compacts to find disposal sites for the waste generated inside of those compacts. It also required the Department of Energy to "define the disposal capacity needed for present and future low-level radioactive waste on a regional basis."[2] As Senator J. Bennett Johnston stated during the debate on the Nuclear Waste Policy Act of 1980, it was the "national interest" that was to be protected by this law. Senator Ernest Hollings said that, "It has become clear that a national solution to low-level waste storage must be worked out."[3] The Senate report on the legislation stated that the nation's waste "must be stored somewhere."[4]

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[1] 73 *Fed.Reg.* 7764 (July 11, 2008).

Similar positions were expressed by Members of Congress during the debate on the passage of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (P.L. 99-240). "By passing this bill . . . [w]e can avert a crisis in the disposal of low-level nuclear waste, and we can work toward a solution of a problem that has troubled our Nation since the onset of nuclear technology," Rep. John Spratt argued on the floor of the House.[5]

The promulgation of the regulations establishing the licensing system for the importation of LLRW also do not refer to any policy change designed to further or encourage the processing and disposal of foreign-generated LLRW in U.S. sites. In fact, such commerce was not even anticipated. The NRC stated that the rule would not be a burden under the Paperwork Reduction Act because

> We expect that there will be few export and imports per year that will be covered by the new requirements established by the rule . . . .
>
> To the NRC's knowledge, there is no appreciable U.S. import or export traffic in radioactive waste. A possible except is the widely accepted practice of returning depleted sealed radioactive sources to a manufacturer for recycle or disposal. This practice is generally encouraged . . . . For this reason, such shipments are excluded from the definition of "radioactive waste" in the final rule.[6]

Moreover, the regulations in 10 CFR 110 were amended specifically to conform to the guidelines of the International Atomic Energy Agency (IAEA) Code of Practice on the International Transboundary Movement of Radioactive Waste which the U.S. had strongly supported. According to the final rule, the Code resulted from a concern within the IAEA about possible "improper transfer and disposal of radioactive waste."[7] There was particular concern that LLRW would be shipped from countries with nuclear generators to other countries under false pretenses.[8] These amendments were also intended to strengthen the NRC's control over radioactive waste entering and leaving the United States.

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[2] 42 USC 2021d(b)(1)(A).

[3] 126 *Cong. Record* 11978 (July 28, 1980) and 126 *Cong. Record* 20138 (July 29, 1980).

[4] "Background and Need," Senate Report 96-548, Jan. 3, 1980.

[5] 131 *Cong. Record* 11403 (Dec. 9, 1985).

[6] 60 *Fed.Reg.* 37556, 37561-2 (July 21, 1995).

However, when two commenters on the proposed rule suggested that no category of radioactive waste be moved into or out of the U.S., the NRC did not agree with these restrictive approaches because it might interfere with some higher national policy goal.

> International commerce in radioactive waste, including movement of waste into and out of the United States, may be desirable from a policy perspective. For example, some commerce involving radioactive waste may further important policy goals of the international community (such as waste shipments for international research) and other shipments may embody desirable take-back features (such as return of U.S. Government radioactive waste and shipments of used radioactive sources to authorized consignees).[9]

That "important policy goal" is not apparent in this license application. What is absolutely clear from this legislative and regulatory history is that neither the Congress nor the NRC ever intended or anticipated that this rule might be used to further the commercial importation of LLRW from foreign decommissioned reactors or other nuclear generators to fill our domestic disposal sites. The legislative and regulatory record reflects only very narrow circumstances where the national interest may open the door to importing waste for disposal. To accept a license for importation absent a clear showing that this furthers a national or international policy goal establishes a major policy change which the Congress has not yet addressed and which the NRC should not implement through the façade of this single licensing action.

According to a recent report from the Government Accountability Office, there is not a single European nation with adequate disposal options for its LLRW. GAO also found that Japan, Canada, Mexico and Australia did not have adequate capacity.[10] Obviously, if the U.S. opens its doors through this license to become the world's nuclear garbage dump, there will be many generators only too happy to come in. There seems little effort in the current regulatory process to prevent this from happening precisely because no one ever anticipated that it could happen.

The United States cannot be put in this position based on the revenue aspirations of a single company, which at this moment also is the single U.S. facility that will take Class A LLRW waste from all generators except those located within the Northwest Compact. This would not further our national interest.

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[7] 60 *Fed.Reg.* 37556, *supra.*

[8] 60 *Fed.Reg.* 37556, 37557-8, *supra.*

[9] 60 *Fed.Reg.* 37556, 37557, *supra.*

[10] "Low-Level Radioactive Waste Management," GAO-07-221, Figure 8, p. 24 (March 2007).

Therefore, by this letter, I am asking you to study the broader policy implications contained in this license application. I believe that when you measure this application against the clear national interest standards that underpin both the relevant statutes and regulations, you will conclude that you should reject this license application.

Sincerely,

Bart Gordon

BART GORDON
Chairman

Cc: The Honorable Ralph Hall
Ranking Member

Attachments

BART GORDON, TENNESSEE
CHAIRMAN

RALPH M. HALL, TEXAS
RANKING MEMBER

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February 1, 2008

The Honorable Jon Huntsman, Jr.
Governor of Utah
Utah State Capitol Complex
350 North State Street, Suite 200
PO Box 142220
Salt Lake City, Utah 84114-2220

Dear Governor Huntsman,

Enclosed is a letter I sent today to the Northwest Interstate Compact of Low-Level Radioactive Waste Management to address a very significant issue: the disposal of low-level radioactive waste (LLRW) from foreign nuclear power companies in a private site located within the boundaries of the Northwest Interstate Compact.

In September of 2007, Energy*Solutions* filed an application with the Nuclear Regulatory Commission (NRC) to import 20,000 tons of radioactive waste from nuclear reactors being decommissioned in Italy. According to that application, the waste would be processed in Tennessee with the resulting product to be disposed on in Energy*Solutions*' Clive, Utah, Class A disposal site. Under the import licensing regulations of the Nuclear Regulatory Commission, the Northwest Compact will be asked to comment on that application.

Energy*Solutions* has the only low-level radioactive waste (LLRW) disposal site in private hands in the United States. By its own accounting, it disposes of more than 90 percent of the LLRW generated in the United States. It does so through a license granted by the State of Utah as an NRC agreement state and with the permission of the Northwest Interstate Compact on Low-Level Radioactive Waste Management. However, in its 1998 Second Amended Resolution and Order, permitting LLRW to be disposed of at the Utah, site, the Compact stated that only because the facility served "an important national purpose" would it be allowed to accept waste from states outside of the compact. The Compact also reserved the right to "modify or rescind" its authorization at any time.[1]

The U.S. has a long-term storage challenge for both low-level and high-level waste, and many European countries face exactly the same challenge. It is not at all clear what "national purpose" would be served by allowing LLRW from other countries to utilize our limited disposal resources. I bring all this to your attention to let you know that I have asked the Compact to review the authorization granted to Energy*Solutions* and undertake a modification of their policy to disallow the storage of waste of which any part has come from a foreign waste generator.

---

[1] "Second Amended Resolution and Order," Northwest Interstate Compact, Nov. 9, 1998, p. 2.

I hope, after consideration of the situation, that you will direct your representative to the Compact to amend Energy*Solutions*' authorization so that this country does not simply become the nuclear garbage dump for the world.

Sincerely,

Bart Gordon

BART GORDON
Chairman

Cc: The Honorable Ralph Hall
Ranking Member

Attachment

Letter also sent to:

The Honorable Dave Freudenthal
Governor of Wyoming
State Capitol, 200 West 24th Street
Cheyenne, WY 82002-0010

The Honorable Linda Lingle
Governor, State of Hawai`i
Executive Chambers
State Capitol
Honolulu, Hawai`i 96813

The Honorable Chris Gregoire
Governor of Washington
PO Box 40002
Olympia, WA 98504-0002
Governor's Office (360) 902-4111

The Honorable Ted Kulongoski
Governor of Oregon
160 State Capitol
900 Court Street
Salem, Oregon 97301-4047

The Honorable C.L. "Butch" Otter
Governor of Idaho
P.O. Box 83720
Boise, Idaho 83720

The Honorable Sarah Palin
Governor of Alaska
State Capitol
P.O. Box 110001
Juneau, AK 99811-0001

The Honorable Brian D. Schweitzer
Governor of Montana
Montana State Capitol Bldg.
P.O. Box 200801
Helena MT 59620-0801

BART GORDON, TENNESSEE
CHAIRMAN

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February 1, 2008

Mr. Michael Garner, Executive Director
Northwest Interstate Compact on
Low-Level Radioactive Waste Management
Washington State Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Mr. Garner:

In September of 2007, Energy*Solutions* filed an application with the Nuclear Regulatory Commission (NRC) to import 20,000 tons of radioactive waste from nuclear reactors being decommissioned in Italy. According to that application, the waste would be processed in Tennessee with the resulting product to be disposed of in Energy*Solutions'* Clive, Utah, Class A disposal site.

Energy*Solutions* has the only low-level radioactive waste (LLRW) disposal site in private hands in the United States. By its own accounting, it disposes of more than 90 percent of the LLRW generated in the United States. It does so through a license granted by the State of Utah as an NRC agreement state and with the permission of the Northwest Interstate Compact on Low-Level Radioactive Waste Management. However, in its 1998 Second Amended Resolution and Order, permitting LLRW to be disposed of at the Utah, site, the Compact stated that only because the facility served "an important national purpose" would it be allowed to accept waste from states outside of the compact. The Compact reserved the right to "modify or rescind" its authorization at any time.[1]

In the next few days, the Compact will be asked by the NRC to approve or disapprove this license to dispose of foreign nuclear waste at Energy*Solutions'* Utah site. These plans by Energy*Solutions* suggest that it is time for the Northwest Compact to reexamine the basis of its earlier approval and determine what national purpose is served by allowing Energy*Solutions* to open its site to foreign waste. This is a very important decision. If granted, this import license would represent an unprecedented reversal in this nation's approach to the disposal of its own LLRW. It would say to the world that the United States is open for business and will take the world's low-level radioactive waste until our facilities are filled, regardless of the needs of our own country. Additionally, such an action would have the additional effect of making the United States responsible for monitoring foreign waste for hundreds of years as some LLRW has a half-life of 500 or more years.

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[1] "Second Amended Resolution and Order," Northwest Interstate Compact, Nov. 9, 1998, p. 2.

The U.S. has a long-term storage challenge for both low-level and high-level waste, and many European countries face exactly the same challenge. We are rapidly approaching the limits of the existing Class B and C LLRW disposal sites. It has been projected that there are 20 years of storage available for Class A LLRW, but this is based on using all of the Energy*Solutions*' capacity for domestic waste.[2] Currently, not a single country in Europe has disposal options for all classes of its LLRW. Despite the plans of various countries for siting LLRW disposal facilities, they have had the same difficulties as in the U.S. to actually implement those plans.[3] Energy*Solutions* would offer a convenient alternative to confronting those thorny issues.

Since the Low-Level Radioactive Waste Policy Act of 1980 was passed to address the problem of disposal of LLRW from U.S. nuclear reactors and other sources, and amended in 1985 to establish regional compacts to look for LLRW disposal sites, the focus of our regulatory system has been on establishing a process to site and license facilities to handle domestic waste. Although small amounts of foreign radioactive waste occasionally have been processed in the United States over the years, the largest appears to have been 1.4 million pounds.[4] Energy*Solutions* is asking to import 40 million pounds, an increase of more than 25-fold.

If this application were a one-time occurrence, perhaps it would be of less significance. However, a review of the documents filed with the Securities and Exchange Commission by Energy*Solutions* at the time of its initial public offering in November of 2007 make it clear that it plans to aggressively pursue "specialized decommissioning and disposal services" in both the United States and Europe.[5] One of its greatest assets is its large site for disposing of LLRW material. It is highly likely that Energy*Solutions*' application to import, process and dispose of Italian LLRW is simply the first in a string that will follow if this one is approved.

I would ask the Compact to carefully examine the situation that is unfolding with Energy*Solutions* to determine if it serves a national purpose. It appears that it is exploiting a loophole in our country's nuclear waste regulatory framework and its agreement with the Compact to put the United States on a path to becoming the nuclear garbage repository for the world. I cannot believe this was the intention of the Compact when the 1998 approval was granted. In particular, I ask the Compact to examine these matters with an eye toward the long-term storage needs of the country and to revoke or amend the Second Amended Resolution and Order.

---

[2] General Accounting Office, "Low-Level Radioactive Waste: Disposal Availability Adequate in the Short Term, but Oversight Needed to Identify any Future Shortfalls," GAO-04-604, June 2004, p. 5.
[3] Government Accountability Office, "Low-Level Radioactive Waste Management: Approaches Used by Foreign Countries May Provide Useful Lessons for Managing U.S. Radioactive Waste," GAO-07-221, March 2007, p. 24.
[4] There have been a total of 24 applications to import low-level radioactive waste filed with the NRC, of which six were withdrawn or not issued, and five are pending. Some are for amounts as small as a cubic meter or a few dozen kilograms. NRC, "Import License Spreadsheet" (copy attached).
[5] Prospectus of Energy*Solutions*, SEC Registration No. 333-141645, Nov. 17, 2007, pp. 4-5.

Pending completion of this effort, I ask that you indicate to the NRC that the Northwest Compact cannot support the application by Energy*Solutions* to import 20,000 tons of Italian nuclear waste for processing and disposal in Utah.

If you have any questions or need additional information, please contact Edith Holleman, counsel, Investigations and Oversight Subcommittee, at (202) 225-8459, or Erica Antonson, legislative assistant in my office, at (202) 225-4231.

Thank you for your consideration of this matter.

Sincerely,

Bart Gordon

BART GORDON
Chairman

Cc: The Honorable Ralph Hall
Ranking Member

Number[	Name[	DocRef[	Commodity[	Quantity[	Unit[	Country[	Use[	Action[
IW001	NEN Life Science Products		LLW, Containing Nickel-63	26.6	m3	Mexico	Treatment in Texas, Disposal at Barnwell, SC	RWA
IW002	Siemens Power Corp		Class A radwaste, LEU, 5.0%, oxide, comb. Material	1200	kg	Germany	Incinerate & re-export for uranium recovery	Issued
IW002/01	Framatome ANP Richland, Inc.		Class A radioactive waste in the form of LEU, 5.0%, oxide, comb.	0	kg	Germany	Amend to change licensee name from Siemens Power Corporation to Framatome	Issued
IW003	ALARON Corp		Class A radwaste, contaminated condenser tubing. Class A waste	110	m3	Taiwan	Decontaminate, recycle, dispose of contaminants	Withdrawn
IW004	Diversified Scientific Services, Inc		Class A mixed radwaste in the form of liquid products	1000	Ci	Canada	Thermal destruction	Issued
IW004/01	Diversified Scientific Services, Inc		Class A mixed radwaste in the form of liquid products			Canada	Amend to change radioactive material license number reference from R-73014.K98	Issued
IW004/02	Diversified Scientific Services, Inc		Class A mixed radwaste in the form of liquid products			Canada	Amend to ext expiration date from 4/30/02 to 12/31/04	Issued
IW004/03	Diversified Scientific Services, Inc		Class A mixed radwaste in the form of liquid products			Canada	Amend to 1) ext exp from 12/31/04 to 12/31/06; & 2) update domestic license info	Issued
IW004/04	Diversified Scientific Services Inc (DSSI)	Ltr. Dtd. 12/22/06	Class A mixed radwaste in the form of liquid products	0	kg	Canada	Amend to ext exp date	Issued
IW005	Chem-Nuclear Systems		Class A radwaste, contaminated condenser tubing, Class A waste	635035.8	kg	Taiwan	Decontaminate, recycle, dispose of contaminants	Withdrawn
IW006	Allied Technology Group, Inc		Class A radwaste, contaminated metal	626000	kg	Taiwan	Decontaminate, recycle, dispose of contaminants	Issued
IW007	GTS Duratek		Class A radioactive waste, contaminated condenser tubing	612356	kg	Taiwan	Decontaminate, recycle, dispose of contaminants	RWA
IW008	Starmet CMI		Class A radwaste, in the form of DU & mineral oil	80000	kg	Ukraine	Processing & re-manufacture of DU into shielding material	Issued
IW008/01	Starmet CMI		Class A radwaste, (DU metal & oxide & mineral oil)	170000	kg	Ukraine	Amend to incr qty of DU from 80,000 kgs to 250,000 kgs; incr qty of mineral oil	RWA
IW009	Framatome ANP		Class A radwaste, (LEU contam combustible material)	1200	kg	Germany	Incinerate, recover U; disp of residue	Issued

IW009/01	Framatome ANP		Class A radwaste, (LEU contam combustible material)		Germany	Amend to correct description	Issued
IW010	Philotechnics, Ltd.		Class A waste, Depl U	50000 kg	UK	For recycle and/or disposal of aircraft counterweights	Issued
IW010/01	Philotechnics	Ltr Dtd. 06/17/03	Class A radwaste, as DU aircraft counterweights for recycle &/or disposal	100000 kg	United Kingdom	Amend to 1) incr qty; 2) ext exp date; 3) add IC; & 4) update licensee address	Withdrawn
IW011	Allied Technology Group		Class A radioactive waste, contaminated scrap metal	3000 t	Taiwan	For processing and recycle or disposal of metal	Pending
IW012	Diversified Scientific Services, Inc		Class A mixed radwaste, 189,000 kgs in 900 drums	600 Ci	Canada	Thermal destruction	Issued
IW012/01	Diversified Scientific Services, Inc		Class A mixed radwaste, Addl 189,000 kg	600 Ci	Canada	Amend to 1) incr qty & 2) ext exp date	Issued
IW012/02	Diversified Scientific Services, Inc		Class A mixed radwaste, Addl 189,000 kg	600 Ci	Canada	Amend to 1) incr qty & 2) ext exp date	Issued
IW012/03	DSSI/Perma-Fix	Appl Dtd. 05/11/07	Class A mixed radwaste (378,000 kgs of contam matls)	5500 Ci	Canada	Amend to: 1) incr qty; 2) ext exp date; & 3) chg licensee contact name	Issued
IW013	RACE		LLW		Various	Processing to reduce volume	RWA
IW014	Sud-Chemie		Class A mixed radwaste, 1,750 kgs	35 kg	South Korea	Return of waste for disposal	RWA
IW015	DSSI/Perma-Fix	Ltr Dtd. 03/16/04	Class A mixed radwaste (Tritium, C-14, Mixed Fission Products)	200 Ci	Mexico	Thermal destruction	Pending
IW016	Eastern Technologies, Inc.		Class A radwaste (Co-60, Co-58, & Mn-54)		Mexico	Laundering & decontamination of protective clothing & related products	Issued
IW017	Duratek Services		Class A radwaste as contaminants of various matls (metals, wood, plastics, liquids		Canada	For recycle and re-use or processing for volume reduction, etc	Issued
IW018	AREVA NP	Ltr Dtd. 05/01/06	Class A & C radwaste, mixed fission products (Fe-55, Co-60, Ni-63 & Pu-241)	545 kg	France	Originally from Surry Power Station - to be returned & processed by	Pending
IW019	UniTech Services	Appl Dtd 08/17/06	Radwaste including metals & dry activity matls that may be radioactively contam	0.5 TBq	Canada	Matls to be sorted by type & levels of radioactivity & returned to Canada for	Issued

IW019-R	UniTech Services		Radwaste including metals & dry activity matls that may be radioactively contam	0 kg	Canada	License revised to 1) improve precision of licensee addresses & related info; & 2)	Issued
IW020-EX	AREVA NP	DLN:06:069	Radwaste, packing matl contam with UO2 Powder	5000 kg	Canada	Return for burial at U.S. Ecology &/or incineration	Issued
IW021	Westinghouse Electric	EFM-07-0432	Class A Radwaste, as waste filter cake & shot contam with LEU	72.29 kg	Canada	Return for disposal at Energy Solutions in Clive, Utah	Issued
IW022	Perma-Fix Northwest, Inc.	Appl Dtd. 05/16/07	Class A radwaste (as contam metal, dry activity matl & liquids	134 TBq	Canada	Recycle, re-use, or processing for volume reduction, etc. (Ref XW012)	Issued
IW023	EnergySolu-tions	IT-IM-2007-09	Class A & C radwaste as contam of metal, dry activity matl & liquids	640 TBq	Italy	Processing & recycling for beneficial reuse at TN facilities &/or disposal at UT facility	Pending
IW024	AREVA NP	Appl Dtd. 09/25/07	Class A & C radwaste (as contam metal, dry activities matl & liquid)	1 m3	France	Originally from XXXXXXXXX to be returned & processed by EnergySolutions for	Pending

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 21, 2008

The Honorable John D. Dingell
Chairman, Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The U.S. Nuclear Regulatory Commission appeared before the Committee on Energy and Commerce, Subcommittee on Energy and Air Quality on May 20, 2008. From that hearing, you forwarded questions for the hearing record to Ms. Margaret Doane. The responses to those questions are enclosed. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Spiros C. Droggitis

Rebecca L. Schmidt, Director
Office of Congressional Affairs

Enclosures:
As stated

cc: Representative Joe Barton

Congressman Jim Matheson

QUESTION 1. In a meeting with Congressional staff, including a representative from my office, NRC officials stated that low-level radioactive (LLRW) waste imported from Italy would still be classified as foreign waste after incineration and treatment in Tennessee and until its disposal and/or return to the country of origin. However, in a January 11, 2008, letter from EnergySolutions to the NRC, EnergySolutions stated that the incinerator ash was "arguably a new waste stream (a processor of residual waste, as defined by specific licensing actions." It also appears that previously, EnergySolutions has imported waste from Canada, incinerated it in Tennessee and then disposed of the residue in Utah as domestic waste.

Under NRC's current regulations, can a LLRW processor obtain a license to import foreign LLRW, incinerate it, and then dispose of the residue as a domestic "processor residual waste"? Is the processor company required to consult with the state and/or the interstate compact in which the disposal site is located?

ANSWER.

Under some state laws and licenses, low-level radioactive waste originally generated out-of-state but processed in-state is attributed to the state where processing occurred. NRC import regulations do not specifically address waste attribution. However, NRC regulations require an applicant to disclose its plans for the ultimate disposition of all imported waste. For this reason, the NRC expects to be fully informed by an import license applicant of any imported waste that will be ultimately disposed of in domestic facilities, including waste that might later be attributed to a domestic source. The NRC's import regulations do not require a processor to consult with disposal sites and or compacts regarding imported waste that has been reclassified as domestic waste. But if NRC determines that material will be reclassified as domestic waste and disposed of in the United States, the NRC will notify and seek the views of the affected disposal states and or compacts before granting the license.

Congressman Jim Matheson

QUESTION 2. Why did the NRC allow Canadian LLRW processed by Energy Solutions/Duratek under IW017 to be disposed of as domestic waste without consulting with either the State of Utah or the Northwest Interstate Compact for Low-Level Radioactive Waste Management?

ANSWER.

Consistent with NRC practice, NRC consulted with the state of Tennessee prior to granting an import license to Duratek. In its application, Duratek stated that "[r]esidual radioactive material from processing the imported material such as floor sweepings, booties, slag, ash, decontaminated solution and abrasives, etc, which is attributable to Duratek under its Tennessee license" would be disposed of according to the Tennessee attribution model. Any waste not attributable to Duratek would "be returned for disposal under the proposed export license which is associated with this application." The application also stated that "while Duratek is unable to ascertain at this time the expected volume of waste associated with the import given the nature of Duratek's business plan, there should not be significant volumes of waste resulting from the imported material that will be disposed of in the United States." The NRC determined that the majority of the treated waste would be returned to Canada.

Congressman Jim Matheson

QUESTION 3. In EnergySolutions' responses to the NRC, it remains unclear whether it intends to import Class B and Class C LLRW for processing in Tennessee at the Bear Creek facility. In the January 11, 2008 letter to the NRC, EnergySolutions stated that "The material that will be received at Bear Creek will be extensively characterized prior to its importation but not classified for disposal. Those materials destined for incineration and metal melting are not received in final form for disposal and therefore waste classification at this point in the process would be premature." Is it your understanding that EnergySolutions intends to import Classes A, B and C waste?

ANSWER.

Radioactive waste is not normally classified until it is readied for disposal. It is the NRC's understanding that EnergySolutions will characterize the waste in Italy and only import material that will be able to be classified as Class A waste once it has been processed and made ready for final disposal. The NRC is still considering this aspect of EnergySolutions' pending license request and, if necessary, may request additional information from the applicant if our understanding is not clearly supported by EnergySolutions' written statements.

ENERGY*SOLUTIONS*

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July 17, 2008

The Honorable John Dingell
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Dingell:

Attached please find the answers to the questions from Congressman Matheson which were contained in your July 2, 2008 letter. Also attached are the following documents:

(1) Amendment No. 1 to Form S-1, July 11, 2008
(2) "Waste – The Way Forward"
(3) "Dealing With The Past/Building The Future at Wylfa"

The document entitled, "Dealing With The Past/Building The Future at Wylfa" was submitted to the Nuclear Decommissioning Authority (NDA) in response to an expression of interest. The document contains business proprietary information and I respectfully request that this document not be publicly disclosed.

It was an honor to testify before the Subcommittee on Energy and Air Quality. Please feel free to call me at (801) 649-2222 or Jill Sigal at (202) 355-9318 if you have additional questions. Thank you.

Sincerely,

Steve Creamer
Chairman and CEO
Energy*Solutions*, Inc.

Attachments

QUESTIONS FOR THE RECORD
Steve Creamer

1. During your testimony before the Energy and Air Quality Subcommittee of the House Energy and Commerce Committee, you demonstrated how small a portion of the capacity of your low-level radioactive waste (LLRW) site would be filled by the Italian waste that Energy*Solutions* currently plans to import. But you also indicated that Energy*Solutions* would apply for other waste import licenses.

Earlier this month, Mark Morant, Energy*Solutions*' international group vice president, speaking at a nuclear new build conference in London, raised the possibility of exporting "UK waste" to the Energy*Solutions*' Clive, Utah, site. "Court Will Decide if Compact Can Block Energy*Solutions* Import Plan," *Nuclear Fuel Cycle Monitor*, May 12, 2008, p. 9. At the same time, Lord Jenkin of Roding, a member of the British House of Lords, during a debate on an energy bill, told the upper house that "Energy*Solutions* has told me that...much of the so-called intermediate waste...can be either recycled for use in new nuclear build or transported to Energy*Solutions'* own disposal facility, called Clive, in the Utah desert." Lord Jenkin went on to say that Energy*Solutions* had claimed these actions would save Britain "a great deal of money." "Sending UK Waste to Clive Gets Attention from Parliament, "*Nuclear Fuel Cycle Monitor*, May 26, 2008, p.12.

A) Do the reports in *Nuclear Fuel Cycle Monitor* accurately reflect the statements of Mark Morant and Lord Jenkin? If not, please supply appropriate documentation explaining why these reports are inaccurate.

Energy*Solutions* Response:

Mark Morant, President International Group, addressed a nuclear power plant new build conference on April 29, 2008. Mr. Morant made a presentation in which he discussed Energy*Solutions*' operations in the United States as well as the United Kingdom (presentation attached). He spoke about how Energy*Solutions* was created and he described our Class A low-level waste disposal facility in Clive, Utah and our Bear Creek processing and recycling facility in Oak Ridge, Tennessee. Also discussed was our management of the 10 Magnox reactor sites in the U.K.

It is my understanding that Mr. Morant challenged policymakers and industry to find solutions to reactor waste management issues in the U.K. He expressed his belief that the decommissioning of the Magnox reactors was being delayed largely due to the absence of waste management solutions. Mr. Morant also discussed how the United States was making good progress on managing low-level waste at facilities such as Clive and how the U.K. might be able to benefit from learning how this progress had been achieved. He also indicated that the U.K. should consider using incineration and metal melting to process some of its material.

Other options for waste management were mentioned including on-site disposal of waste at U.K. reactor sites and sending the waste to Clive if the U.S. would accept it and if the U.K. Government changed its current policy which prohibits the exportation of waste.

I did not hear Lord Jenkin's speech in Parliament so I cannot say whether the report in Nuclear Fuel Cycle Monitor accurately reflects his statements.

B) Has anyone from Energy*Solutions*' discussed with Lord Jenkin, or another member of Parliament, the possibility of disposing of low- and medium-level radioactive waste generated in the United Kingdom at Clive and suggest that it would be cheaper to send the waste to Clive than for Britain to build a storage and/or disposal vault? Please identify that person and provide any documents relating to that conversation.

Energy*Solutions* Response:

It is my understanding that Lord Jenkin requested that Energy*Solutions* provide him with a briefing to describe ways in which the company could challenge the established waste paradigm that exists in the U.K. Mr. Morant and two colleagues met with Lord Jenkin and Lord De Mauley on May 8, 2008.

Mr. Morant made similar points to Lord Jenkin that he made at the April conference – challenges facing policymakers and industry on waste management in the U.K.

When asked, Mr. Morant explained to Lord Jenkin that the majority of Magnox reactor waste would meet Clive's acceptance criteria and that disposal at Clive would be cheaper than the current U.K. baseline which entails waste retrieval, expensive treatment, long-term storage, and ultimate transport and disposal in a deep repository. Mr. Morant pointed out that there were obstacles to exporting this waste to the United States including a U.K. policy that prohibits such exports.

Other options for waste management were discussed at length including on-site disposal in the U.K.

Lord Jenkin was given a copy of a document (see attached) at this meeting entitled – "Dealing With The Past/Building The Future." This document, which contains business proprietary information, was not discussed during the meeting.

As part of the international group's routine dialogue with government officials, other Members of Parliament were briefed on the waste management challenges for the Magnox program along the lines of what was discussed with Lord Jenkin and Lord De Mauley.

2. Your testimony that the Clive site has over 30 years of disposal capacity is based on the historically low disposal year of 2007, despite the fact that every other year since 1999 has resulted in a greater volume of waste disposed of at Clive. It is also directly counter to the projection of 19 additional years of disposal capacity in Energy*Solutions*' November 12, 2007, prospectus issued prior to your initial public offering. According to the prospectus statement, the 19-year projection was based "on our estimate of lower future disposal volumes than experienced in recent years, our ability to optimize disposal capacity and our assumption that we will obtain a license amendment to convert a disposal cell originally intended for 11e(2) waste to Class A LLRW." It is difficult to understand this significant increase in disposal space, and there is no indication in subsequent filings with the Securities and Exchange Commission (SEC) that this development has been reported to Energy*Solutions*' shareholders.

According to your own data, over the last nine years, Energy*Solutions*, on average, has disposed of more than 10.5 million cubic feet of LLRW every year. Yet the 30-year projection assumes that only 5 million cubic feet would be disposed of annually. Testimony elicited at the hearing from the Government Accountability Office and yourself indicated that this projection did not include increased waste from any new nuclear power plants or other radioactive sources, foreign waste or any new decommissioning or Energy Department clean-up projects.

A) Please provide a full description of the assumptions and calculations used to obtain the 19-year disposal capacity at Clive used in the November 14, 2007 Energy*Solutions* prospectus and of the assumptions and calculations used to obtain the 30+-plus year disposal capacity referred during the May 20, 2008, hearing.

Energy*Solutions* Response:

The total remaining disposal capacity at Clive is approximately 150M cubic feet. This value was used in calculating the 19-year remaining capacity figure that appeared in the Company's Form S-1 filed in November 2007 as well as the 30-year+ remaining capacity figure expressed by Steve Creamer in his May 20, 2008 testimony. The 19-year and 30-year figures are different because different assumptions were made at two different times with respect to projected future annual waste receipts. The 19-year calculation conservatively assumed that future annual volume receipts would be similar to the average annual volume that had been received at the Clive Utah disposal facility over the previous 16 years (10.7M cubic feet). The Company disclosed the following in its Form S-1 filed in November 2007:

> We believe that we have sufficient capacity for approximately 19 years of operations based on our estimate of lower future disposal volumes than experienced in recent years, our ability to optimize disposal capacity utilization and our assumption that we will obtain a license amendment to convert a disposal cell originally intended for 11e (2) waste to Class A LLRW. If we are unable to

> obtain the license amendment, our projected capacity to dispose of Class A LLRW would be materially reduced. If future disposal volumes increase beyond our expectations or if our other assumptions prove to be incorrect, then the remaining capacity at Clive would be exhausted more quickly than projected.

In the Company's Form S-1 filed on July 7, 2008, the Company projected 30-years+ of remaining capacity at the Clive facility, stating:

> We believe that we have sufficient capacity for more than 30 years of operations based on our estimate of future disposal volumes, our ability to optimize disposal capacity utilization and our assumption that we will obtain a license amendment to convert a disposal cell originally intended for 11e (2) waste to Class A LLRW. If we are unable to obtain the license amendment, our projected capacity to dispose of Class A LLRW would be materially reduced. If future disposal volumes increase beyond our expectations or if our other assumptions prove to be incorrect, then the remaining capacity at Clive would be exhausted more quickly than projected.

The Company, having had the benefit of seven additional months of operating results and a more accurate view of current and potential pipeline of disposal projects, concluded that future annual receipts at its Clive facility would more likely average around 6M cubic feet, a figure that is similar to the Clive facility disposal volume in 2007 and consistent with the expected volume in 2008, based on 2008 year-to-date volumes. The Company concluded in revising its estimate of years of remaining capacity that the types of large volume clean-up projects experienced by the Company between 2000 and 2005 are not anticipated in the future. The increased disposal volume in the early to mid part of the century was a result of the large Department of Energy closure cleanup projects at Rocky Flats and Fernald. These large cleanup projects have been completed. We do not expect future DOE cleanup projects to result in the same volume of offsite disposal at Clive. Mr. Creamer's testimony was consistent with the revised estimate disclosed in the Company's July 7, 2008 S-1. The revised estimate is also consistent with the Government Accountability Office (GAO) testimony of May 20, 2008 which stated, "Since 2005, the volume of class A waste disposed of has declined by two-thirds primarily because DOE completed several large cleanup projects, extending the capacity of the Utah facility for an additional 13 years, for a total of 33 years of remaining disposal capacity."

The detailed calculation for the 19-year and the 30-year values presented are outlined below:

19-Year Calculation:

Assumptions:
Total remaining disposal capacity: 150M cubic feet
Estimated future annual waste receipts: 10.7M cubic feet per year (based on our16-year average)
Disposal Cell Compaction Ratio (DCCR): 0.75[1]

1. Annual cell capacity consumed calculation: Multiply the estimated future annual waste receipts by the DCCR

   10.7M x 0.75 = 8M cubic feet of annual cell capacity consumed

2. Number of year of capacity remaining: Divide total remaining disposal capacity by the annual cell capacity consumed :

   150M / 8M/year = 19 years

30-Year Calculation:

Assumptions:
Total remaining disposal capacity: 150M cubic feet
Estimated future annual waste receipts: 6M cubic feet per year (based on the 2007 actual disposal volume and the year-to-date disposal volume for 2008)
Disposal Cell Compaction Ratio (DCCR): 0.75

3. Annual cell capacity consumed calculation: Multiply the estimated future annual waste receipts by the DCCR

   6M x 0.75 = 4.5M cubic feet of annual cell capacity consumed

4. Number of year of capacity remaining: Divide total remaining disposal capacity by the annual cell capacity consumed :

   150M / 4.5M/year = 33 years

B) Was the 30+-year disposal capacity calculation provided to Energy*Solutions*' stockholders in a 10-Q or 8-K filing with the SEC, or communicated to them in any other official document from the company? If so, please provide a copy of that document(s). If not, please explain why this significant information has not been shared with the Energy*Solutions* stockholders.

Energy*Solutions* Response:

As indicated above, the Company disclosed its revised projection of the Clive facility's remaining capacity in its Form S-1 filing with the SEC on July 7, 2008 in conjunction with its secondary offering. The relevant language from the July 7, 2008 S-1 filing is quoted above. (S-1, page 14)